
Appendix A

Data Tables

Table A-1. National Air Quality Trends Statistics for Criteria Pollutants, 1987–1996

| Statistic | Units | # of Sites | Percentile | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------|-------------------|------------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Carbon Monoxide | | | | | | | | | | | | | |
| 2nd Max. 8hr. | PPM | 345 | 95th | 11.9 | 11.2 | 11.1 | 10.6 | 9.9 | 8.6 | 8.1 | 8.1 | 7.7 | 7.3 |
| " | " | " | 90th | 10.0 | 10.3 | 9.8 | 8.8 | 8.8 | 7.9 | 7.3 | 7.6 | 7.0 | 6.5 |
| " | " | " | 75th | 8.3 | 7.8 | 7.8 | 7.1 | 6.9 | 6.4 | 5.8 | 6.2 | 5.5 | 5.1 |
| " | " | " | 50th | 6.3 | 6.1 | 6.0 | 5.5 | 5.2 | 4.8 | 4.7 | 4.9 | 4.2 | 3.9 |
| " | " | " | 25th | 4.7 | 4.3 | 4.4 | 4.2 | 3.9 | 3.7 | 3.6 | 3.8 | 3.2 | 3.0 |
| " | " | " | 10th | 3.6 | 3.4 | 3.5 | 3.1 | 3.0 | 2.8 | 2.9 | 2.8 | 2.5 | 2.4 |
| " | " | " | 5th | 3.0 | 3.0 | 2.8 | 2.6 | 2.4 | 2.5 | 2.3 | 2.3 | 2.3 | 2.1 |
| " | " | " | Arith. Mean | 6.7 | 6.4 | 6.4 | 5.9 | 5.6 | 5.2 | 4.9 | 5.1 | 4.5 | 4.2 |
| Lead | | | | | | | | | | | | | |
| Max. Qtr. | µg/m ³ | 208 | 95th | 0.41 | 0.37 | 0.27 | 0.26 | 0.19 | 0.17 | 0.16 | 0.13 | 0.11 | 0.12 |
| " | " | " | 90th | 0.24 | 0.22 | 0.17 | 0.17 | 0.15 | 0.12 | 0.10 | 0.09 | 0.08 | 0.08 |
| " | " | " | 75th | 0.14 | 0.13 | 0.11 | 0.09 | 0.07 | 0.06 | 0.06 | 0.05 | 0.05 | 0.04 |
| " | " | " | 50th | 0.09 | 0.08 | 0.06 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| " | " | " | 25th | 0.06 | 0.04 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 |
| " | " | " | 10th | 0.04 | 0.03 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| " | " | " | 5th | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| " | " | " | Arith. Mean | 0.16 | 0.12 | 0.09 | 0.09 | 0.07 | 0.06 | 0.05 | 0.04 | 0.04 | 0.04 |
| Nitrogen Dioxide | | | | | | | | | | | | | |
| Arith. Mean | PPM | 214 | 95th | 0.043 | 0.046 | 0.043 | 0.041 | 0.043 | 0.039 | 0.037 | 0.041 | 0.039 | 0.038 |
| " | " | " | 90th | 0.038 | 0.037 | 0.035 | 0.034 | 0.033 | 0.033 | 0.033 | 0.034 | 0.032 | 0.032 |
| " | " | " | 75th | 0.027 | 0.027 | 0.027 | 0.026 | 0.025 | 0.024 | 0.025 | 0.025 | 0.024 | 0.024 |
| " | " | " | 50th | 0.020 | 0.021 | 0.020 | 0.019 | 0.019 | 0.019 | 0.019 | 0.020 | 0.019 | 0.018 |
| " | " | " | 25th | 0.013 | 0.013 | 0.013 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| " | " | " | 10th | 0.006 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 |
| " | " | " | 5th | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| " | " | " | Arith. Mean | 0.021 | 0.022 | 0.021 | 0.020 | 0.020 | 0.019 | 0.019 | 0.020 | 0.019 | 0.019 |
| Ozone | | | | | | | | | | | | | |
| 2nd Max. 1hr. | PPM | 600 | 95th | 0.183 | 0.202 | 0.190 | 0.177 | 0.175 | 0.160 | 0.160 | 0.154 | 0.158 | 0.145 |
| " | " | " | 90th | 0.166 | 0.180 | 0.151 | 0.150 | 0.150 | 0.133 | 0.140 | 0.133 | 0.140 | 0.129 |
| " | " | " | 75th | 0.140 | 0.151 | 0.125 | 0.121 | 0.124 | 0.113 | 0.120 | 0.118 | 0.124 | 0.115 |
| " | " | " | 50th | 0.117 | 0.128 | 0.107 | 0.108 | 0.108 | 0.100 | 0.105 | 0.105 | 0.111 | 0.104 |
| " | " | " | 25th | 0.102 | 0.109 | 0.096 | 0.095 | 0.095 | 0.090 | 0.092 | 0.093 | 0.099 | 0.094 |
| " | " | " | 10th | 0.090 | 0.092 | 0.085 | 0.083 | 0.082 | 0.082 | 0.080 | 0.082 | 0.085 | 0.085 |
| " | " | " | 5th | 0.083 | 0.083 | 0.080 | 0.074 | 0.075 | 0.076 | 0.074 | 0.075 | 0.077 | 0.079 |
| " | " | " | Arith. Mean | 0.124 | 0.133 | 0.116 | 0.113 | 0.114 | 0.106 | 0.108 | 0.108 | 0.113 | 0.106 |

Table A-1. National Air Quality Trends Statistics for Criteria Pollutants, 1987–1996 (continued)

| Statistic | Units | # of Sites | Percentile | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------------|-------------------|------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <i>PM₁₀</i> | | | | | | | | | | | | | |
| Annual Avg. | µg/m ³ | 900 | 95th | — | 52.5 | 52.7 | 46.2 | 46.1 | 42.1 | 41.5 | 40.0 | 39.6 | 38.4 |
| " | " | " | 90th | — | 44.0 | 43.9 | 39.7 | 39.5 | 36.4 | 36.0 | 36.6 | 35.0 | 33.6 |
| " | " | " | 75th | — | 37.6 | 36.8 | 34.2 | 33.4 | 31.0 | 30.1 | 30.5 | 29.3 | 27.9 |
| " | " | " | 50th | — | 30.5 | 30.1 | 28.0 | 28.2 | 25.6 | 25.4 | 25.4 | 24.3 | 23.3 |
| " | " | " | 25th | — | 25.8 | 25.6 | 23.4 | 23.5 | 21.9 | 21.0 | 21.1 | 20.0 | 19.4 |
| " | " | " | 10th | — | 20.6 | 20.6 | 19.1 | 18.5 | 17.9 | 16.8 | 16.8 | 15.9 | 16.0 |
| " | " | " | 5th | — | 17.5 | 17.4 | 16.4 | 15.1 | 13.9 | 13.4 | 13.1 | 12.7 | 13.2 |
| " | " | " | Arith. Mean | — | 32.2 | 32.0 | 29.4 | 29.1 | 26.8 | 26.0 | 26.2 | 25.1 | 24.2 |
| <i>Sulfur Dioxide</i> | | | | | | | | | | | | | |
| Arith. Mean | PPM | 479 | 95th | 0.0183 | 0.0195 | 0.0182 | 0.0165 | 0.0160 | 0.0153 | 0.0146 | 0.0137 | 0.0115 | 0.0113 |
| " | " | " | 90th | 0.0154 | 0.0155 | 0.0153 | 0.0144 | 0.0132 | 0.0127 | 0.0124 | 0.0121 | 0.0100 | 0.0098 |
| " | " | " | 75th | 0.0116 | 0.0116 | 0.0114 | 0.0105 | 0.0099 | 0.0095 | 0.0092 | 0.0089 | 0.0073 | 0.0074 |
| " | " | " | 50th | 0.0083 | 0.0084 | 0.0081 | 0.0076 | 0.0075 | 0.0068 | 0.0067 | 0.0064 | 0.0051 | 0.0053 |
| " | " | " | 25th | 0.0053 | 0.0053 | 0.0050 | 0.0045 | 0.0046 | 0.0043 | 0.0040 | 0.0037 | 0.0033 | 0.0033 |
| " | " | " | 10th | 0.0021 | 0.0023 | 0.0023 | 0.0020 | 0.0020 | 0.0020 | 0.0021 | 0.0020 | 0.0017 | 0.0017 |
| " | " | " | 5th | 0.0013 | 0.0016 | 0.0016 | 0.0014 | 0.0015 | 0.0013 | 0.0014 | 0.0015 | 0.0014 | 0.0014 |
| " | " | " | Arith. Mean | 0.0089 | 0.0089 | 0.0087 | 0.0081 | 0.0078 | 0.0073 | 0.0071 | 0.0068 | 0.0056 | 0.0056 |
| 2nd Max. 24hr. | PPM | 480 | 95th | 0.0915 | 0.0920 | 0.0935 | 0.0810 | 0.0710 | 0.0710 | 0.0680 | 0.0710 | 0.0570 | 0.0590 |
| " | " | " | 90th | 0.0725 | 0.0720 | 0.0760 | 0.0650 | 0.0600 | 0.0590 | 0.0580 | 0.0590 | 0.0470 | 0.0465 |
| " | " | " | 75th | 0.0530 | 0.0560 | 0.0530 | 0.0500 | 0.0455 | 0.0443 | 0.0420 | 0.0440 | 0.0330 | 0.0340 |
| " | " | " | 50th | 0.0390 | 0.0400 | 0.0390 | 0.0340 | 0.0320 | 0.0310 | 0.0285 | 0.0320 | 0.0220 | 0.0235 |
| " | " | " | 25th | 0.0245 | 0.0260 | 0.0240 | 0.0215 | 0.0210 | 0.0190 | 0.0190 | 0.0190 | 0.0160 | 0.0160 |
| " | " | " | 10th | 0.0100 | 0.0125 | 0.0120 | 0.0100 | 0.0100 | 0.0100 | 0.0100 | 0.0080 | 0.0080 | 0.0085 |
| " | " | " | 5th | 0.0055 | 0.0065 | 0.0065 | 0.0050 | 0.0060 | 0.0045 | 0.0050 | 0.0050 | 0.0040 | 0.0040 |
| " | " | " | Arith. Mean | 0.0420 | 0.0439 | 0.0420 | 0.0380 | 0.0347 | 0.0335 | 0.0326 | 0.0335 | 0.0259 | 0.0268 |

Table A-2. National Carbon Monoxide Emissions Estimates, 1987–1996 (thousand short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--------------------------------|----------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| FUEL COMBUSTION | 6,967 | 7,379 | 7,449 | 5,510 | 5,856 | 6,155 | 5,586 | 5,519 | 5,934 | 5,962 |
| Electric Utilities | 307 | 320 | 327 | 363 | 349 | 350 | 363 | 370 | 372 | 377 |
| coal | 223 | 236 | 239 | 234 | 234 | 236 | 246 | 247 | 250 | 263 |
| oil | 20 | 25 | 26 | 20 | 19 | 15 | 16 | 15 | 10 | 11 |
| gas | 53 | 48 | 51 | 51 | 51 | 51 | 49 | 53 | 55 | 44 |
| internal combustion | 10 | 11 | 11 | 57 | 45 | 47 | 51 | 55 | 58 | 59 |
| Industrial | 649 | 669 | 672 | 879 | 920 | 955 | 1,043 | 1,041 | 1,056 | 1,072 |
| coal | 85 | 87 | 87 | 105 | 101 | 102 | 101 | 100 | 98 | 99 |
| oil | 46 | 46 | 46 | 74 | 60 | 64 | 66 | 66 | 71 | 72 |
| gas | 252 | 265 | 271 | 226 | 284 | 300 | 322 | 337 | 345 | 348 |
| other | 171 | 173 | 173 | 279 | 267 | 264 | 286 | 287 | 297 | 305 |
| internal combustion | 96 | 98 | 96 | 195 | 208 | 227 | 268 | 251 | 245 | 247 |
| Other | 6,011 | 6,390 | 6,450 | 4,269 | 4,587 | 4,849 | 4,181 | 4,108 | 4,506 | 4,513 |
| residential wood | 5,719 | 6,086 | 6,161 | 3,781 | 4,090 | 4,332 | 3,679 | 3,607 | 3,999 | 3,993 |
| other | 292 | 303 | 288 | 488 | 497 | 517 | 502 | 502 | 506 | 520 |
| INDUSTRIAL PROCESSES | 6,851 | 7,034 | 7,013 | 5,852 | 5,740 | 5,683 | 5,898 | 5,839 | 5,790 | 5,817 |
| Chemical & Allied Processing | 1,798 | 1,917 | 1,925 | 1,183 | 1,127 | 1,112 | 1,093 | 1,171 | 1,223 | 1,223 |
| Metals Processing | 1,984 | 2,101 | 2,132 | 2,640 | 2,571 | 2,496 | 2,536 | 2,475 | 2,380 | 2,378 |
| Petroleum & Related Industries | 455 | 441 | 436 | 333 | 345 | 371 | 371 | 338 | 348 | 348 |
| Other Industrial Processes | 713 | 711 | 716 | 537 | 548 | 544 | 594 | 600 | 624 | 635 |
| Solvent Utilization | 2 | 2 | 2 | 5 | 5 | 5 | 5 | 5 | 6 | 6 |
| Storage & Transport | 50 | 56 | 55 | 76 | 28 | 17 | 51 | 24 | 25 | 25 |
| Waste Disposal & Recycling | 1,850 | 1,806 | 1,747 | 1,079 | 1,116 | 1,138 | 1,248 | 1,225 | 1,185 | 1,203 |
| TRANSPORTATION | 86,209 | 86,861 | 81,832 | 73,965 | 78,114 | 76,233 | 76,794 | 78,706 | 70,947 | 69,946 |
| On-Road Vehicles | 71,250 | 71,081 | 66,050 | 57,848 | 62,074 | 59,859 | 60,202 | 61,833 | 54,106 | 52,944 |
| Non-Road Sources | 14,959 | 15,780 | 15,781 | 16,117 | 16,040 | 16,374 | 16,592 | 16,873 | 16,841 | 17,002 |
| MISCELLANEOUS | 8,852 | 15,895 | 8,153 | 11,208 | 8,751 | 7,052 | 7,013 | 9,614 | 7,050 | 7,099 |
| Structural Fires | 242 | 242 | 242 | 164 | 166 | 168 | 169 | 170 | 171 | 172 |
| Agricultural Fires | 483 | 612 | 571 | 415 | 413 | 421 | 415 | 441 | 465 | 475 |
| Prescribed Burning | 4,332 | 4,332 | 4,332 | 4,668 | 4,713 | 4,760 | 4,810 | 4,860 | 4,916 | 4,955 |
| Forest Wildfires | 3,795 | 10,709 | 3,009 | 5,928 | 3,430 | 1,674 | 1,586 | 4,114 | 1,469 | 1,469 |
| Other | NA | NA | NA | 32 | 28 | 30 | 34 | 28 | 28 | 27 |
| TOTAL ALL SOURCES | 108,879 | 117,169 | 104,447 | 96,535 | 98,461 | 95,123 | 95,291 | 99,677 | 89,721 | 88,822 |

Note: Some columns may not sum to totals due to rounding.

Table A-3. National Lead Emissions Estimates, 1987–1996 (short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| FUEL COMBUSTION | 510 | 511 | 505 | 500 | 495 | 491 | 495 | 494 | 487 | 493 |
| Electric Utilities | 64 | 66 | 67 | 64 | 61 | 59 | 61 | 61 | 57 | 62 |
| coal | 48 | 46 | 46 | 46 | 46 | 47 | 49 | 49 | 50 | 50 |
| oil | 16 | 20 | 21 | 18 | 15 | 12 | 12 | 12 | 7 | 12 |
| Industrial | 22 | 19 | 18 | 18 | 18 | 18 | 19 | 18 | 16 | 17 |
| coal | 14 | 14 | 14 | 14 | 15 | 14 | 14 | 14 | 14 | 14 |
| oil | 8 | 5 | 4 | 3 | 3 | 4 | 5 | 4 | 3 | 3 |
| Other | 425 | 426 | 420 | 418 | 416 | 414 | 415 | 415 | 414 | 414 |
| commercial/institutional coal | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 |
| commercial/institutional oil | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 |
| misc. fuel comb. (except res.) | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| residential other | 14 | 16 | 12 | 10 | 9 | 7 | 8 | 8 | 8 | 7 |
| INDUSTRIAL PROCESSES | 3,004 | 3,090 | 3,161 | 3,278 | 3,081 | 2,734 | 2,869 | 3,005 | 2,892 | 2,812 |
| Chemical & Allied Processing | 123 | 136 | 136 | 136 | 132 | 93 | 92 | 96 | 144 | 117 |
| Metals Processing | 1,835 | 1,965 | 2,088 | 2,169 | 1,975 | 1,773 | 1,899 | 2,027 | 2,067 | 2,000 |
| Other Industrial Processes | 202 | 172 | 173 | 169 | 167 | 56 | 54 | 53 | 59 | 57 |
| Waste Disposal & Recycling | 844 | 817 | 765 | 804 | 807 | 812 | 824 | 829 | 622 | 638 |
| TRANSPORTATION | 4,167 | 3,452 | 1,802 | 1,197 | 592 | 584 | 547 | 544 | 564 | 564 |
| On-Road Vehicles | 3,317 | 2,567 | 982 | 421 | 18 | 18 | 19 | 19 | 19 | 19 |
| Non-Road Sources | 850 | 885 | 820 | 776 | 574 | 565 | 529 | 525 | 545 | 545 |
| TOTAL ALL SOURCES | 7,681 | 7,053 | 5,468 | 4,975 | 4,168 | 3,808 | 3,911 | 4,043 | 3,943 | 3,869 |

Note: Some columns may not sum to totals due to rounding.

Table A-4. National Nitrogen Oxides Emissions Estimates, 1987–1996 (thousand short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| FUEL COMBUSTION | 10,014 | 10,472 | 10,537 | 10,895 | 10,779 | 10,928 | 11,111 | 11,015 | 10,827 | 10,494 |
| Electric Utilities | 6,246 | 6,545 | 6,593 | 6,663 | 6,519 | 6,504 | 6,651 | 6,565 | 6,384 | 6,034 |
| coal | 5,376 | 5,666 | 5,676 | 5,642 | 5,559 | 5,579 | 5,744 | 5,636 | 5,579 | 5,517 |
| oil | 217 | 273 | 285 | 221 | 212 | 170 | 180 | 163 | 96 | 96 |
| gas | 605 | 557 | 582 | 565 | 580 | 579 | 551 | 591 | 562 | 461 |
| internal combustion | 48 | 50 | 49 | 235 | 168 | 175 | 176 | 175 | 148 | 151 |
| Industrial | 3,063 | 3,187 | 3,209 | 3,035 | 2,979 | 3,071 | 3,151 | 3,147 | 3,144 | 3,170 |
| coal | 596 | 617 | 615 | 585 | 570 | 574 | 589 | 602 | 597 | 599 |
| oil | 292 | 296 | 294 | 265 | 237 | 244 | 245 | 241 | 247 | 246 |
| gas | 1,505 | 1,584 | 1,625 | 1,182 | 1,250 | 1,301 | 1,330 | 1,333 | 1,324 | 1,336 |
| other | 119 | 121 | 120 | 131 | 129 | 126 | 124 | 124 | 123 | 125 |
| internal combustion | 552 | 569 | 556 | 874 | 793 | 825 | 863 | 846 | 854 | 864 |
| Other | 706 | 740 | 736 | 1,196 | 1,281 | 1,353 | 1,308 | 1,303 | 1,298 | 1,289 |
| commercial/institutional coal | 37 | 39 | 38 | 40 | 36 | 38 | 40 | 40 | 38 | 38 |
| commercial/institutional oil | 121 | 117 | 106 | 97 | 88 | 93 | 93 | 95 | 103 | 102 |
| commercial/institutional gas | 144 | 157 | 159 | 200 | 210 | 225 | 232 | 237 | 231 | 234 |
| misc. fuel comb. (except res.) | 11 | 11 | 11 | 34 | 32 | 28 | 31 | 31 | 30 | 29 |
| residential wood | 69 | 74 | 75 | 46 | 50 | 53 | 45 | 44 | 49 | 48 |
| residential other | 323 | 343 | 347 | 780 | 865 | 916 | 867 | 857 | 847 | 838 |
| INDUSTRIAL PROCESSES | 841 | 860 | 852 | 892 | 816 | 857 | 861 | 878 | 873 | 880 |
| Chemical & Allied Processing | 255 | 274 | 273 | 168 | 165 | 163 | 155 | 160 | 158 | 159 |
| Metals Processing | 75 | 82 | 83 | 97 | 76 | 81 | 83 | 91 | 98 | 98 |
| Petroleum & Related Industries | 101 | 100 | 97 | 153 | 121 | 148 | 123 | 117 | 110 | 110 |
| Other Industrial Processes | 320 | 315 | 311 | 378 | 352 | 361 | 370 | 389 | 399 | 403 |
| Solvent Utilization | 3 | 3 | 3 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
| Storage & Transport | 2 | 2 | 2 | 3 | 6 | 5 | 5 | 5 | 6 | 6 |
| Waste Disposal & Recycling | 85 | 85 | 84 | 91 | 95 | 96 | 123 | 114 | 99 | 100 |
| TRANSPORTATION | 11,598 | 12,467 | 12,374 | 11,633 | 11,891 | 12,098 | 12,285 | 12,616 | 11,998 | 11,781 |
| On-Road Vehicles | 7,651 | 7,661 | 7,682 | 7,040 | 7,373 | 7,440 | 7,510 | 7,672 | 7,323 | 7,171 |
| Non-Road Sources | 3,947 | 4,806 | 4,693 | 4,593 | 4,518 | 4,658 | 4,776 | 4,944 | 4,675 | 4,610 |
| MISCELLANEOUS | 352 | 727 | 293 | 371 | 286 | 254 | 225 | 383 | 237 | 239 |
| TOTAL ALL SOURCES | 22,806 | 24,526 | 24,057 | 23,792 | 23,772 | 24,137 | 24,482 | 24,892 | 23,935 | 23,393 |

Note: Some columns may not sum to totals due to rounding.

Table A-5. National Volatile Organic Compounds Emissions Estimates, 1987–1996 (thousand short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| FUEL COMBUSTION | 1,283 | 1,360 | 1,372 | 1,005 | 1,075 | 1,114 | 993 | 989 | 1,073 | 1,075 |
| Electric Utilities | 35 | 37 | 38 | 47 | 44 | 44 | 45 | 45 | 44 | 45 |
| coal | 25 | 27 | 27 | 27 | 27 | 27 | 29 | 29 | 29 | 31 |
| oil | 6 | 7 | 7 | 6 | 5 | 4 | 4 | 4 | 3 | 3 |
| gas | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| internal combustion | 1 | 1 | 1 | 12 | 10 | 10 | 10 | 10 | 10 | 10 |
| Industrial | 131 | 136 | 134 | 182 | 196 | 187 | 186 | 196 | 206 | 208 |
| coal | 7 | 7 | 7 | 7 | 6 | 7 | 6 | 8 | 6 | 6 |
| oil | 16 | 16 | 16 | 12 | 11 | 12 | 12 | 12 | 12 | 12 |
| gas | 57 | 61 | 61 | 58 | 60 | 52 | 51 | 63 | 73 | 73 |
| other | 36 | 36 | 36 | 51 | 51 | 49 | 51 | 50 | 50 | 51 |
| internal combustion | 15 | 15 | 15 | 54 | 68 | 66 | 66 | 64 | 65 | 66 |
| Other | 1,117 | 1,188 | 1,200 | 776 | 835 | 884 | 762 | 748 | 823 | 822 |
| residential wood | 1,085 | 1,155 | 1,169 | 718 | 776 | 822 | 698 | 684 | 759 | 758 |
| other | 32 | 33 | 31 | 58 | 59 | 62 | 64 | 63 | 64 | 64 |
| INDUSTRIAL PROCESSES | 10,535 | 10,854 | 10,755 | 10,000 | 10,178 | 10,380 | 10,578 | 10,738 | 10,780 | 9,482 |
| Chemical & Allied Processing | 923 | 982 | 980 | 634 | 710 | 715 | 701 | 691 | 660 | 436 |
| Metals Processing | 70 | 74 | 74 | 122 | 123 | 124 | 124 | 126 | 125 | 70 |
| Petroleum & Related Industries | 655 | 645 | 639 | 612 | 640 | 632 | 649 | 647 | 642 | 517 |
| Other Industrial Processes | 394 | 408 | 403 | 401 | 391 | 414 | 442 | 438 | 450 | 439 |
| Solvent Utilization | 5,743 | 5,945 | 5,964 | 5,750 | 5,782 | 5,901 | 6,016 | 6,162 | 6,183 | 6,273 |
| Storage & Transport | 1,801 | 1,842 | 1,753 | 1,495 | 1,532 | 1,583 | 1,600 | 1,629 | 1,652 | 1,312 |
| Waste Disposal & Recycling | 950 | 959 | 941 | 986 | 999 | 1,010 | 1,046 | 1,046 | 1,067 | 433 |
| TRANSPORTATION | 10,721 | 10,722 | 9,613 | 8,815 | 9,003 | 8,622 | 8,684 | 9,021 | 8,135 | 7,928 |
| On-Road Vehicles | 8,477 | 8,290 | 7,192 | 6,313 | 6,499 | 6,072 | 6,103 | 6,401 | 5,701 | 5,502 |
| Non-Road Sources | 2,244 | 2,432 | 2,422 | 2,502 | 2,503 | 2,551 | 2,581 | 2,619 | 2,433 | 2,426 |
| MISCELLANEOUS | 655 | 1,230 | 642 | 1,164 | 845 | 579 | 641 | 798 | 599 | 601 |
| Other Combustion | 655 | 1,230 | 641 | 1,064 | 756 | 485 | 535 | 710 | 511 | 516 |
| structural fires | 44 | 44 | 44 | 29 | 30 | 30 | 30 | 30 | 31 | 31 |
| agricultural fires | 67 | 85 | 79 | 48 | 48 | 49 | 48 | 51 | 54 | 55 |
| slash/prescribed burning | 182 | 182 | 182 | 234 | 236 | 239 | 241 | 246 | 252 | 256 |
| forest wildfires | 361 | 918 | 335 | 749 | 439 | 164 | 212 | 379 | 171 | 171 |
| other | NA | NA | NA | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Other | 0 | 1 | 1 | 100 | 89 | 94 | 105 | 88 | 88 | 85 |
| TOTAL ALL SOURCES | 23,194 | 24,167 | 22,383 | 20,985 | 21,100 | 20,695 | 20,895 | 21,546 | 20,586 | 19,086 |

Note: Some columns may not sum to totals due to rounding.

Table A-6. National Particulate Matter (PM₁₀) Emissions Estimates, 1987–1996 (thousand short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| FUEL COMBUSTION | 1,335 | 1,384 | 1,386 | 1,196 | 1,147 | 1,183 | 1,124 | 1,113 | 1,179 | 1,186 |
| Electric Utilities | 284 | 279 | 274 | 295 | 257 | 257 | 279 | 273 | 268 | 282 |
| coal | 271 | 265 | 259 | 265 | 232 | 234 | 253 | 246 | 244 | 258 |
| oil | 9 | 10 | 11 | 9 | 10 | 7 | 9 | 8 | 5 | 5 |
| gas | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 |
| internal combustion | 3 | 3 | 3 | 20 | 15 | 16 | 17 | 17 | 18 | 18 |
| Industrial | 239 | 244 | 243 | 270 | 233 | 243 | 257 | 270 | 302 | 306 |
| coal | 67 | 70 | 70 | 84 | 72 | 74 | 71 | 70 | 70 | 71 |
| oil | 48 | 48 | 48 | 52 | 44 | 45 | 45 | 44 | 49 | 50 |
| gas | 44 | 45 | 44 | 41 | 34 | 40 | 43 | 43 | 45 | 45 |
| other | 78 | 79 | 78 | 87 | 72 | 74 | 86 | 74 | 73 | 75 |
| internal combustion | 3 | 3 | 3 | 6 | 10 | 11 | 12 | 38 | 64 | 65 |
| Other | 812 | 862 | 869 | 631 | 657 | 683 | 588 | 570 | 610 | 598 |
| residential wood | 758 | 807 | 817 | 501 | 535 | 558 | 464 | 446 | 484 | 472 |
| other | 54 | 55 | 52 | 130 | 122 | 124 | 124 | 125 | 126 | 126 |
| INDUSTRIAL PROCESSES | 1,288 | 1,294 | 1,276 | 1,306 | 1,264 | 1,269 | 1,240 | 1,219 | 1,231 | 1,232 |
| Chemical & Allied Processing | 58 | 62 | 63 | 77 | 68 | 71 | 66 | 76 | 67 | 67 |
| Metals Processing | 194 | 208 | 211 | 214 | 251 | 250 | 181 | 184 | 212 | 211 |
| Petroleum & Related Industries | 62 | 60 | 58 | 55 | 43 | 43 | 38 | 38 | 40 | 40 |
| Other Industrial Processes | 606 | 601 | 591 | 583 | 520 | 506 | 501 | 495 | 511 | 510 |
| Solvent Utilization | 2 | 2 | 2 | 4 | 5 | 5 | 6 | 6 | 6 | 6 |
| Storage & Transport | 100 | 101 | 101 | 102 | 101 | 117 | 114 | 106 | 109 | 109 |
| Waste Disposal & Recycling | 265 | 259 | 251 | 271 | 276 | 278 | 334 | 313 | 287 | 290 |
| TRANSPORTATION | 881 | 1,041 | 1,016 | 934 | 947 | 961 | 954 | 972 | 883 | 869 |
| On-Road Vehicles | 360 | 369 | 367 | 336 | 349 | 343 | 321 | 320 | 293 | 274 |
| Non-Road Sources | 520 | 672 | 649 | 598 | 598 | 618 | 633 | 652 | 590 | 595 |
| TOTAL ALL SOURCES | 3,504 | 3,721 | 3,678 | 3,436 | 3,358 | 3,413 | 3,318 | 3,305 | 3,293 | 3,288 |

Table A-7. Miscellaneous and Natural PM₁₀ Emissions Estimates, 1987–1996 (thousand short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| MISCELLANEOUS | 37,453 | 39,444 | 37,461 | 24,419 | 24,122 | 23,865 | 24,196 | 25,461 | 22,454 | 22,702 |
| Agriculture & Forestry | 7,326 | 7,453 | 7,320 | 5,146 | 5,106 | 4,909 | 4,475 | 4,690 | 4,661 | 4,708 |
| Other Combustion | 988 | 1,704 | 912 | 1,203 | 941 | 785 | 768 | 1,048 | 778 | 783 |
| wildfires | 389 | 1,086 | 300 | 601 | 332 | 171 | 152 | 424 | 145 | 145 |
| managed burning | 540 | 559 | 553 | 558 | 563 | 568 | 570 | 578 | 586 | 591 |
| other | 59 | 59 | 59 | 45 | 45 | 46 | 46 | 46 | 46 | 47 |
| Cooling Towers | NA | NA | NA | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Fugitive Dust | 29,139 | 30,287 | 29,229 | 18,069 | 18,076 | 18,171 | 18,954 | 19,722 | 17,013 | 17,209 |
| wind erosion | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| unpaved roads | 11,110 | 12,379 | 11,798 | 11,234 | 11,206 | 10,918 | 11,430 | 11,370 | 10,362 | 10,303 |
| paved roads | 5,530 | 5,900 | 5,769 | 2,248 | 2,399 | 2,423 | 2,462 | 2,538 | 2,409 | 2,417 |
| construction | 12,121 | 11,662 | 11,269 | 4,249 | 4,092 | 4,460 | 4,651 | 5,245 | 3,654 | 3,950 |
| other | 377 | 346 | 392 | 336 | 377 | 369 | 409 | 569 | 586 | 538 |
| NAT. SOURCES (wind erosion) | 1,577 | 18,110 | 12,101 | 2,092 | 2,077 | 2,227 | 509 | 2,160 | 1,146 | 5,316 |
| TOTAL ALL SOURCES | 39,030 | 57,555 | 49,562 | 26,512 | 26,199 | 26,093 | 24,706 | 27,621 | 23,599 | 28,018 |

Note: Some columns may not sum to totals due to rounding.

Table A-8. National Sulfur Dioxide Emissions Estimates, 1987–1996 (thousand short tons)

| Source Category | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| FUEL COMBUSTION | 19,549 | 19,881 | 20,050 | 20,290 | 19,796 | 19,493 | 19,245 | 18,887 | 16,230 | 16,786 |
| Electric Utilities | 15,819 | 16,110 | 16,340 | 15,909 | 15,784 | 15,416 | 15,189 | 14,889 | 12,080 | 12,604 |
| coal | 15,138 | 15,344 | 15,529 | 15,220 | 15,087 | 14,824 | 14,527 | 14,313 | 11,603 | 12,114 |
| oil | 651 | 15,344 | 15,529 | 639 | 652 | 546 | 612 | 522 | 413 | 412 |
| gas | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 21 |
| internal combustion | 29 | 31 | 30 | 49 | 45 | 46 | 49 | 53 | 55 | 57 |
| Industrial | 3,068 | 3,111 | 3,086 | 3,550 | 3,256 | 3,292 | 3,284 | 3,218 | 3,357 | 3,399 |
| coal | 1,817 | 1,856 | 1,840 | 1,914 | 1,805 | 1,783 | 1,763 | 1,740 | 1,728 | 1,762 |
| oil | 807 | 806 | 812 | 927 | 779 | 801 | 809 | 777 | 912 | 918 |
| gas | 356 | 360 | 346 | 543 | 516 | 552 | 555 | 542 | 548 | 548 |
| other | 82 | 83 | 82 | 158 | 142 | 140 | 140 | 141 | 147 | 147 |
| internal combustion | 6 | 6 | 6 | 9 | 14 | 16 | 17 | 19 | 23 | 23 |
| Other | 662 | 660 | 624 | 831 | 755 | 784 | 772 | 780 | 793 | 782 |
| commercial/institutional coal | 164 | 172 | 169 | 212 | 184 | 190 | 193 | 192 | 200 | 200 |
| commercial/institutional oil | 310 | 295 | 274 | 425 | 376 | 396 | 381 | 391 | 397 | 389 |
| commercial/institutional gas | 2 | 2 | 2 | 7 | 7 | 7 | 8 | 8 | 8 | 8 |
| misc. fuel comb. (except res.) | 1 | 1 | 1 | 6 | 6 | 6 | 6 | 6 | 5 | 5 |
| residential wood | 10 | 11 | 11 | 7 | 7 | 8 | 6 | 6 | 7 | 7 |
| other | 175 | 180 | 167 | 175 | 176 | 177 | 178 | 177 | 176 | 173 |
| INDUSTRIAL PROCESSES | 1,976 | 2,052 | 2,010 | 1,900 | 1,721 | 1,758 | 1,723 | 1,676 | 1,637 | 1,644 |
| Chemical & Allied Processing | 425 | 449 | 440 | 297 | 280 | 278 | 269 | 275 | 286 | 287 |
| Metals Processing | 648 | 707 | 695 | 726 | 612 | 615 | 603 | 562 | 530 | 530 |
| Petroleum & Related Industries | 445 | 443 | 429 | 430 | 378 | 416 | 383 | 379 | 369 | 368 |
| Other Industrial Processes | 418 | 411 | 405 | 399 | 396 | 396 | 392 | 398 | 403 | 409 |
| Solvent Utilization | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| Storage & Transport | 4 | 5 | 5 | 7 | 10 | 9 | 5 | 2 | 2 | 2 |
| Waste Disposal & Recycling | 35 | 36 | 36 | 42 | 44 | 44 | 71 | 60 | 47 | 48 |
| TRANSPORTATION | 771 | 806 | 837 | 934 | 969 | 980 | 903 | 685 | 676 | 674 |
| On-Road Vehicles | 538 | 553 | 570 | 542 | 570 | 578 | 517 | 301 | 304 | 307 |
| Non-Road Sources | 233 | 253 | 267 | 392 | 399 | 402 | 385 | 384 | 372 | 368 |
| TOTAL ALL SOURCES | 22,308 | 22,767 | 22,907 | 23,136 | 22,496 | 22,240 | 21,879 | 21,262 | 18,552 | 19,113 |

Note: Some columns may not sum to totals due to rounding.

Table A-9. National Long-Term Air Quality Trends, 1977–1996

| Year | CO 2nd Max. 8hr. ppm | Pb Max. Qtr. µg/m ³ | NO ₂ Arith. Mean ppm | Ozone 2nd Max. 1hr. ppm | PM ₁₀ Wtd. Arith. Mean µg/m ³ | SO ₂ Arith. Mean ppm |
|--|----------------------------|--------------------------------------|---------------------------------------|-------------------------------|---|---------------------------------------|
| 1977-86 (168 sites) (122 sites) (65 sites) (238 sites) — (278 sites) | | | | | | |
| 1977 | 10.9 | 1.35 | 0.026 | 0.152 | — | 0.0133 |
| 1978 | 10.5 | 1.26 | 0.027 | 0.156 | — | 0.0128 |
| 1979 | 10.1 | 1.06 | 0.026 | 0.141 | — | 0.0125 |
| 1980 | 9.3 | 0.73 | 0.024 | 0.143 | — | 0.0112 |
| 1981 | 8.9 | 0.59 | 0.023 | 0.131 | — | 0.0108 |
| 1982 | 8.2 | 0.50 | 0.022 | 0.127 | — | 0.0100 |
| 1983 | 8.2 | 0.40 | 0.022 | 0.144 | — | 0.0098 |
| 1984 | 8.1 | 0.36 | 0.023 | 0.128 | — | 0.0099 |
| 1985 | 7.3 | 0.25 | 0.023 | 0.127 | — | 0.0092 |
| 1986 | 7.3 | 0.16 | 0.022 | 0.122 | — | 0.0091 |
| 1987-96 (345 sites) (208 sites) (214 sites) (600 sites) (900 sites) (479 sites) | | | | | | |
| 1987 | 6.7 | 0.16 | 0.021 | 0.124 | — | 0.0089 |
| 1988 | 6.4 | 0.12 | 0.022 | 0.133 | 32.2 | 0.0089 |
| 1989 | 6.4 | 0.09 | 0.021 | 0.116 | 32.0 | 0.0087 |
| 1990 | 5.9 | 0.09 | 0.020 | 0.113 | 29.4 | 0.0081 |
| 1991 | 5.6 | 0.07 | 0.020 | 0.114 | 29.1 | 0.0078 |
| 1992 | 5.2 | 0.06 | 0.019 | 0.106 | 26.8 | 0.0073 |
| 1993 | 4.9 | 0.05 | 0.019 | 0.108 | 26.0 | 0.0071 |
| 1994 | 5.1 | 0.04 | 0.020 | 0.108 | 26.2 | 0.0068 |
| 1995 | 4.5 | 0.04 | 0.019 | 0.113 | 25.1 | 0.0056 |
| 1996 | 4.2 | 0.04 | 0.019 | 0.106 | 24.2 | 0.0056 |

Table A-10. National Air Quality Trends Statistics by Monitoring Location, 1987–1996

| Statistic | Units | # of Sites | Location | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------|-------------------|------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Carbon Monoxide | | | | | | | | | | | | | |
| 2nd Max. 8hr. | ppm | 10 | Rural | 3.5 | 3.1 | 2.8 | 2.6 | 2.4 | 2.4 | 2.1 | 2.3 | 2.2 | 1.9 |
| " | " | 142 | Suburban | 6.3 | 6.0 | 6.0 | 5.5 | 5.2 | 4.9 | 4.8 | 4.9 | 4.3 | 4.0 |
| " | " | 190 | Urban | 7.2 | 6.9 | 6.8 | 6.3 | 6.0 | 5.5 | 5.1 | 5.4 | 4.8 | 4.5 |
| Lead | | | | | | | | | | | | | |
| Max. Qtr. | ug/m ³ | 5 | Rural | 0.08 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.02 | 0.03 | 0.02 |
| " | " | 107 | Suburban | 0.13 | 0.09 | 0.08 | 0.07 | 0.06 | 0.05 | 0.04 | 0.04 | 0.04 | 0.03 |
| " | " | 96 | Urban | 0.19 | 0.15 | 0.10 | 0.11 | 0.07 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 |
| Nitrogen Dioxide | | | | | | | | | | | | | |
| Arith. Mean | ppm | 46 | Rural | 0.008 | 0.009 | 0.008 | 0.008 | 0.008 | 0.008 | 0.007 | 0.008 | 0.007 | 0.007 |
| " | " | 89 | Suburban | 0.023 | 0.023 | 0.023 | 0.022 | 0.022 | 0.021 | 0.020 | 0.021 | 0.020 | 0.020 |
| " | " | 77 | Urban | 0.027 | 0.027 | 0.027 | 0.025 | 0.025 | 0.024 | 0.024 | 0.025 | 0.024 | 0.024 |
| Ozone | | | | | | | | | | | | | |
| 2nd Max. 1hr. | ppm | 194 | Rural | 0.115 | 0.124 | 0.110 | 0.109 | 0.107 | 0.102 | 0.104 | 0.103 | 0.108 | 0.104 |
| " | " | 276 | Suburban | 0.129 | 0.140 | 0.119 | 0.116 | 0.119 | 0.110 | 0.112 | 0.112 | 0.117 | 0.108 |
| " | " | 113 | Urban | 0.127 | 0.134 | 0.115 | 0.111 | 0.112 | 0.104 | 0.105 | 0.106 | 0.110 | 0.106 |
| PM₁₀ | | | | | | | | | | | | | |
| Wtd. Arith. Mean | ug/m ³ | 119 | Rural | — | 25.3 | 25.5 | 23.9 | 22.8 | 21.4 | 19.9 | 20.2 | 19.3 | 19.3 |
| " | " | 356 | Suburban | — | 33.3 | 32.9 | 30.3 | 29.9 | 27.7 | 27.0 | 27.0 | 26.1 | 24.9 |
| " | " | 404 | Urban | — | 33.4 | 33.1 | 30.4 | 30.4 | 27.8 | 27.2 | 27.3 | 26.0 | 25.2 |
| Sulfur Dioxide | | | | | | | | | | | | | |
| Arith. Mean | ppm | 138 | Rural | 0.0073 | 0.0073 | 0.0071 | 0.0067 | 0.0065 | 0.0063 | 0.0063 | 0.0060 | 0.0054 | 0.0052 |
| " | " | 191 | Suburban | 0.0094 | 0.0095 | 0.0091 | 0.0085 | 0.0082 | 0.0077 | 0.0075 | 0.0071 | 0.0057 | 0.0058 |
| " | " | 139 | Urban | 0.0099 | 0.0101 | 0.0099 | 0.0090 | 0.0086 | 0.0079 | 0.0076 | 0.0075 | 0.0059 | 0.0058 |

Table A-11. Maximum Air Quality Concentrations by County, 1996

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|------------------------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| AL | CALHOUN | 116,034 | . | . | . | 0.102 | 31 | . |
| AL | CLAY | 13,252 | . | . | . | . | 46 | 0.019 |
| AL | COLBERT | 51,666 | . | . | . | . | 45 | . |
| AL | DE KALB | 54,651 | . | . | . | . | 45 | . |
| AL | ELMORE | 49,210 | . | . | . | 0.102 | . | . |
| AL | ESCAMBIA | 35,518 | . | . | . | . | 41 | . |
| AL | ETOWAH | 99,840 | . | 0.26 | . | . | 50 | . |
| AL | FRANKLIN | 27,814 | . | . | . | . | 45 | . |
| AL | GENEVA | 23,647 | . | . | . | 0.077 | . | . |
| AL | HOUSTON | 81,331 | . | . | . | . | 54 | . |
| AL | JACKSON | 47,796 | . | . | . | . | 33 | 0.027 |
| AL | JEFFERSON | 651,525 | 5.7 | 0.13 | . | 0.141 | 100 | 0.015 |
| AL | LAWRENCE | 31,513 | . | . | . | 0.096 | . | . |
| AL | LIMESTONE | 54,135 | . | . | . | . | 43 | . |
| AL | MADISON | 238,912 | 3 | . | . | 0.102 | 54 | . |
| AL | MARENGO | 23,084 | . | . | . | . | 52 | . |
| AL | MOBILE | 378,643 | . | . | . | 0.104 | 91 | 0.07 |
| AL | MONTGOMERY | 209,085 | 1.5 | . | 0.01 | 0.091 | 39 | 0.022 |
| AL | MORGAN | 100,043 | . | . | . | 0.114 | 45 | 0.001 |
| AL | PIKE | 27,595 | . | 0.79 | . | . | 45 | . |
| AL | RUSSELL | 46,860 | . | . | . | . | 38 | . |
| AL | SHELBY | 99,358 | . | . | 0.01 | 0.127 | 42 | . |
| AL | SUMTER | 16,174 | . | . | . | 0.08 | . | . |
| AL | TALLADEGA | 74,107 | . | . | . | . | 53 | . |
| AL | TUSCALOOSA | 150,522 | . | . | . | . | 58 | . |
| AL | WALKER | 67,670 | . | . | . | . | 46 | . |
| AK | ANCHORAGE BOROUGH | 226,338 | 10.5 | . | . | . | 133 | . |
| AK | FAIRBANKS NORTH STAR BOROUGH | 77,720 | 8.6 | . | . | . | . | . |
| AK | JUNEAU BOROUGH | 26,751 | . | . | . | . | 79 | . |
| AK | YUKON-KOYUKUK CA | 8,478 | . | . | . | 0.057 | . | . |
| AZ | COCHISE | 97,624 | . | . | . | 0.079 | 69 | . |
| AZ | COCONINO | 96,591 | . | . | . | 0.082 | 31 | . |
| AZ | GILA | 40,216 | . | . | . | . | 66 | . |
| AZ | GRAHAM | 26,554 | . | . | . | . | 84 | . |
| AZ | MARICOPA | 2,122,101 | 10 | 0.05 | 0.0316 | 0.122 | 130 | 0.017 |
| AZ | NAVAJO | 77,658 | . | . | . | . | 28 | . |
| AZ | PIMA | 666,880 | 5.1 | 0.05 | 0.019 | 0.092 | 81 | 0.004 |
| AZ | PINAL | 116,379 | . | . | . | . | 0.02 | . |
| AZ | SANTA CRUZ | 29,676 | . | . | . | . | 88 | . |
| AZ | YAVAPAI | 107,714 | . | . | . | . | 22 | . |
| AZ | YUMA | 106,895 | . | . | . | 0.098 | 59 | . |
| AR | ARKANSAS | 21,653 | . | . | . | . | 70 | . |
| AR | ASHLEY | 24,319 | . | . | . | . | 55 | . |
| AR | CRAIGHEAD | 68,956 | . | . | . | . | 53 | . |
| AR | CRITTENDEN | 49,939 | . | . | . | 0.114 | 58 | . |
| AR | GARLAND | 73,397 | . | . | . | . | 40 | . |
| AR | JEFFERSON | 85,487 | . | . | . | . | 51 | . |
| AR | MARION | 12,001 | . | . | . | . | 51 | . |
| AR | MILLER | 38,467 | . | . | . | . | 50 | . |
| AR | MONTGOMERY | 7,841 | . | . | . | 0.07 | . | . |
| AR | NEWTON | 7,666 | . | . | . | 0.08 | . | . |
| AR | OUACHITA | 30,574 | . | . | . | . | 45 | . |
| AR | PHILLIPS | 28,838 | . | . | . | . | 64 | . |
| AR | POLK | 17,347 | . | . | . | . | 47 | . |
| AR | POPE | 45,883 | . | . | . | . | 46 | . |
| AR | PULASKI | 349,660 | 3.8 | 0 | 0.0108 | 0.102 | 52 | 0.009 |
| AR | SEBASTIAN | 99,590 | . | . | . | . | 47 | . |
| AR | UNION | 46,719 | . | . | . | . | 47 | 0.023 |
| AR | WASHINGTON | 113,409 | . | . | . | . | 48 | . |
| AR | WHITE | 54,676 | . | . | . | . | 49 | . |
| CA | ALAMEDA | 1,279,182 | 3.8 | 0 | 0.0218 | 0.137 | 44 | . |
| CA | AMADOR | 30,039 | 1.4 | . | . | 0.127 | . | . |
| CA | BUTTE | 182,120 | 5.3 | 0 | 0.013 | 0.096 | 62 | . |
| CA | CALAVERAS | 31,998 | 0.8 | . | . | 0.13 | 33 | . |
| CA | COLUSA | 16,275 | . | . | . | 0.101 | 73 | . |
| CA | CONTRA COSTA | 803,732 | 2.7 | 0.02 | 0.0172 | 0.117 | 45 | . |
| CA | DEL NORTE | 23,460 | . | . | . | . | 40 | . |
| CA | EL DORADO | 125,995 | 4.8 | . | 0.0107 | 0.13 | 64 | . |
| CA | FRESNO | 667,490 | 6.7 | 0 | 0.0214 | 0.151 | 101 | 0.008 |
| CA | GLENN | 24,798 | . | . | . | 0.092 | 79 | . |
| CA | HUMBOLDT | 119,118 | . | 0 | . | . | 56 | . |
| CA | IMPERIAL | 109,303 | 14.1 | 0.05 | 0.0143 | 0.143 | 440 | 0.013 |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|-----------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| CA | INYO | 18,281 | . | . | 0.091 | 221 | . | . |
| CA | KERN | 543,477 | 5.6 | 0 | 0.163 | 110 | . | 0.009 |
| CA | KINGS | 101,469 | . | . | 0.139 | 138 | . | . |
| CA | LAKE | 50,631 | . | . | 0.08 | 20 | . | . |
| CA | LASSEN | 27,598 | . | . | . | 35 | . | . |
| CA | LOS ANGELES | 8,863,164 | 14.5 | 0.06 | 0.0481 | 0.197 | 109 | . |
| CA | MADERA | 88,090 | . | . | 0.128 | 68 | . | . |
| CA | MARIN | 230,096 | 3.4 | . | 0.095 | 47 | . | . |
| CA | MARIPOSA | 14,302 | . | . | 0.11 | 96 | . | . |
| CA | MENDOCINO | 80,345 | 2.4 | . | 0.055 | 49 | . | . |
| CA | MERCED | 178,403 | . | . | 0.124 | 57 | . | . |
| CA | MODOC | 9,678 | . | . | . | 53 | . | . |
| CA | MONO | 9,956 | 3 | . | 0.09 | 81 | . | . |
| CA | MONTEREY | 355,660 | 2.4 | . | 0.091 | 40 | . | . |
| CA | NAPA | 110,765 | 3.8 | . | 0.089 | 39 | . | . |
| CA | NEVADA | 78,510 | . | . | 0.111 | 86 | . | . |
| CA | ORANGE | 2,410,556 | 6.6 | . | 0.144 | 77 | 0.004 | . |
| CA | PLACER | 172,796 | 2.3 | 0 | 0.131 | 45 | . | . |
| CA | PLUMAS | 19,739 | . | . | 0.09 | 61 | . | . |
| CA | RIVERSIDE | 1,170,413 | 5 | 0.04 | 0.0286 | 0.182 | 155 | 0.004 |
| CA | SACRAMENTO | 1,041,219 | 7.1 | 0.01 | 0.022 | 0.138 | 80 | 0.005 |
| CA | SAN BENITO | 36,697 | . | . | 0.118 | 35 | . | . |
| CA | SAN BERNARDINO | 1,418,380 | 6.6 | 0.04 | 0.0383 | 0.215 | 123 | . |
| CA | SAN DIEGO | 2,498,016 | 6 | 0.02 | 0.0218 | 0.133 | 92 | . |
| CA | SAN FRANCISCO | 723,959 | 5.1 | 0.01 | 0.0215 | 0.061 | 59 | . |
| CA | SAN JOAQUIN | 480,628 | 6.7 | 0 | 0.0232 | 0.126 | 61 | . |
| CA | SAN LUIS OBISPO | 217,162 | 2.3 | . | 0.0125 | 0.109 | . | . |
| CA | SAN MATEO | 649,623 | 3.4 | . | 0.0196 | 0.091 | 45 | . |
| CA | SANTA BARBARA | 369,608 | 4.5 | 0 | 0.0191 | 0.13 | 63 | . |
| CA | SANTA CLARA | 1,497,577 | 5.8 | 0.01 | 0.0251 | 0.115 | 68 | . |
| CA | SANTA CRUZ | 229,734 | 0.7 | . | 0.0054 | 0.102 | 69 | . |
| CA | SHASTA | 147,036 | . | . | 0.11 | 50 | . | . |
| CA | SIERRA | 3,318 | . | . | . | 114 | . | . |
| CA | SISKIYOU | 43,531 | . | . | 0.07 | 35 | . | . |
| CA | SOLANO | 340,421 | 4.5 | . | 0.117 | 43 | . | 0.006 |
| CA | SONOMA | 388,222 | 3 | . | 0.085 | 39 | . | . |
| CA | STANISLAUS | 370,522 | 5.6 | 0 | 0.0219 | 0.125 | 83 | . |
| CA | SUTTER | 64,415 | 4.1 | . | 0.0123 | 0.108 | 69 | . |
| CA | TEHAMA | 49,625 | . | . | 0.09 | 49 | . | . |
| CA | TRINITY | 13,063 | . | . | . | 63 | . | . |
| CA | TULARE | 311,921 | 3.9 | . | 0.139 | 87 | . | . |
| CA | TUOLUMNE | 48,456 | 2.5 | . | 0.117 | . | . | . |
| CA | VENTURA | 669,016 | 3.3 | 0 | 0.144 | 79 | . | 0.003 |
| CA | YOLO | 141,092 | 1.3 | . | 0.113 | 65 | . | . |
| CO | ADAMS | 265,038 | 3.9 | 0.05 | 0.0215 | 0.089 | 96 | 0.015 |
| CO | ALAMOSA | 13,617 | . | . | . | 92 | . | . |
| CO | ARAPAHOE | 391,511 | 2.6 | . | 0.0316 | 0.103 | . | . |
| CO | ARCHULETA | 5,345 | . | . | . | 85 | . | . |
| CO | BOULDER | 225,339 | 5.5 | . | 0.092 | 59 | . | . |
| CO | DELTA | 20,980 | . | . | . | 67 | . | . |
| CO | DENVER | 467,610 | 7.3 | 0.05 | 0.0331 | 0.092 | 70 | 0.024 |
| CO | DOUGLAS | 60,391 | . | . | 0.102 | 26 | . | . |
| CO | EAGLE | 21,928 | . | . | . | 52 | . | . |
| CO | EL PASO | 397,014 | 5 | 0.01 | 0.077 | 76 | . | . |
| CO | FREMONT | 32,273 | . | . | . | 37 | . | . |
| CO | GARFIELD | 29,974 | . | . | . | 78 | . | . |
| CO | GUNNISON | 10,273 | . | . | 0.086 | 91 | . | . |
| CO | JEFFERSON | 438,430 | 4.3 | . | 0.107 | 39 | . | . |
| CO | LAKE | 6,007 | . | 0.04 | . | . | . | . |
| CO | LA PLATA | 32,284 | . | . | . | 92 | . | . |
| CO | LARIME | 186,136 | 5.1 | . | 0.093 | 52 | . | . |
| CO | MESA | 93,145 | 5.8 | . | . | 63 | . | . |
| CO | MONTEZUMA | 18,672 | . | 0.01 | 0.077 | . | . | . |
| CO | MONTROSE | 24,423 | . | . | . | 60 | . | . |
| CO | PITKIN | 12,661 | . | . | . | 66 | . | . |
| CO | PROWERS | 13,347 | . | . | . | 80 | . | . |
| CO | PUEBLO | 123,051 | . | . | . | 49 | . | . |
| CO | ROUTT | 14,088 | . | . | . | 137 | . | . |
| CO | SAN MIGUEL | 3,653 | . | . | . | 105 | . | . |
| CO | SUMMIT | 12,881 | . | . | . | 56 | . | . |
| CO | TELLER | 12,468 | . | . | . | 195 | . | . |
| CO | WELD | 131,821 | 7 | . | 0.097 | 56 | . | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|--------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| CT | FAIRFIELD | 827,645 | 4.1 | 0.02 | 0.0235 | 0.126 | 65 | 0.026 |
| CT | HARTFORD | 851,783 | 4.5 | 0.03 | 0.0161 | 0.091 | 49 | 0.022 |
| CT | LITCHFIELD | 174,092 | . | . | . | 0.112 | 50 | . |
| CT | MIDDLESEX | 143,196 | . | . | . | 0.102 | 38 | . |
| CT | NEW HAVEN | 804,219 | 2.9 | 0.05 | 0.026 | 0.12 | 109 | . |
| CT | NEW LONDON | 254,957 | . | . | . | 0.121 | 56 | . |
| CT | TOLLAND | 128,699 | . | . | 0.006 | 0.101 | . | 0.013 |
| CT | WINDHAM | 102,525 | . | . | . | . | 35 | . |
| DE | KENT | 110,993 | . | . | . | 0.11 | . | . |
| DE | NEW CASTLE | 441,946 | 3.6 | . | 0.019 | 0.108 | 81 | . |
| DE | SUSSEX | 113,229 | . | . | . | 0.109 | 50 | 0.023 |
| DC | WASHINGTON | 606,900 | 4.5 | 0.02 | 0.0264 | 0.11 | 49 | 0.025 |
| FL | ALACHUA | 181,596 | . | . | . | . | 44 | . |
| FL | BAY | 126,994 | . | . | . | . | 50 | . |
| FL | BREVARD | 398,978 | . | . | . | 0.087 | 44 | . |
| FL | BROWARD | 1,255,488 | 4.4 | 0.05 | 0.0095 | 0.103 | 48 | 0.008 |
| FL | CALHOUN | 11,011 | . | . | . | 0.08 | . | . |
| FL | COLLIER | 152,099 | . | . | . | . | 45 | . |
| FL | DADE | 1,937,094 | 4.6 | 0.01 | 0.016 | 0.097 | 62 | 0.005 |
| FL | DUVAL | 672,971 | 3.8 | 0.02 | 0.0149 | 0.096 | 53 | 0.024 |
| FL | ESCAMBIA | 262,798 | . | . | . | 0.098 | 37 | 0.033 |
| FL | GULF | 11,504 | . | . | . | . | 47 | . |
| FL | HAMILTON | 10,930 | . | . | . | . | 62 | 0.019 |
| FL | HILLSBOROUGH | 834,054 | 3.9 | 2.81 | 0.0098 | 0.113 | 81 | 0.087 |
| FL | LEE | 335,113 | . | . | . | 0.08 | 38 | . |
| FL | LEON | 192,493 | . | . | . | 0.087 | 33 | . |
| FL | MANATEE | 211,707 | . | . | . | 0.091 | 48 | . |
| FL | MARTIN | 100,900 | . | . | . | . | 42 | . |
| FL | NASSAU | 43,941 | . | . | . | . | 61 | 0.03 |
| FL | ORANGE | 677,491 | 4.1 | 0 | 0.0126 | 0.104 | 67 | 0.008 |
| FL | OSCEOLA | 107,728 | . | . | . | 0.096 | . | . |
| FL | PALM BEACH | 863,518 | 3.6 | 0 | 0.012 | 0.09 | 56 | . |
| FL | PASCO | 281,131 | . | . | . | 0.086 | . | . |
| FL | PINELLAS | 851,659 | 2.8 | 0 | 0.0112 | 0.092 | 50 | 0.033 |
| FL | POLK | 405,382 | . | . | . | 0.092 | 45 | 0.021 |
| FL | PUTNAM | 65,070 | . | . | . | . | 45 | 0.019 |
| FL | ST JOHNS | 83,829 | . | . | . | 0.09 | . | . |
| FL | ST LUCIE | 150,171 | . | . | . | 0.072 | . | . |
| FL | SARASOTA | 277,776 | 5.1 | . | . | 0.094 | 73 | 0.018 |
| FL | SEMINOLE | 287,529 | . | . | . | 0.092 | 49 | . |
| FL | VOLUSIA | 370,712 | . | . | . | 0.085 | 63 | . |
| GA | BARTOW | 55,911 | . | . | . | . | . | 0.014 |
| GA | BIBB | 149,967 | . | . | . | . | 34 | . |
| GA | CHATHAM | 216,935 | . | . | . | 0.085 | . | 0.03 |
| GA | CHATTOOGA | 22,242 | . | . | . | . | 51 | . |
| GA | DE KALB | 545,837 | 3.7 | 0.02 | 0.0175 | 0.13 | 56 | . |
| GA | DOUGHERTY | 96,311 | . | . | . | . | 21 | . |
| GA | ELBERT | 18,949 | . | . | . | . | 48 | . |
| GA | FANNIN | 15,992 | . | . | . | 0.091 | . | 0.033 |
| GA | FLOYD | 81,251 | . | . | . | . | . | 0.016 |
| GA | FULTON | 648,951 | 3.8 | 0.03 | 0.0266 | 0.137 | 60 | 0.022 |
| GA | GLYNN | 62,496 | . | . | . | 0.086 | 30 | . |
| GA | GWINNETT | 352,910 | . | . | . | 0.109 | . | . |
| GA | MUSCOGEE | 179,278 | . | 0.65 | . | 0.095 | 58 | . |
| GA | PAULDING | 41,611 | . | . | 0.0052 | 0.114 | . | . |
| GA | RICHMOND | 189,719 | . | . | . | 0.099 | 44 | . |
| GA | ROCKDALE | 54,091 | . | . | 0.0059 | 0.123 | . | . |
| GA | SPALDING | 54,457 | . | . | . | . | 48 | . |
| GA | WASHINGTON | 19,112 | . | . | . | . | 59 | . |
| HI | HONOLULU | 836,231 | 3 | 0.03 | 0.0031 | 0.047 | 29 | 0.009 |
| HI | KAUAI | 51,177 | . | . | . | . | 36 | . |
| ID | ADA | 205,775 | 5 | . | 0.0228 | . | 90 | . |
| ID | BANNOCK | 66,026 | . | . | 0.0144 | . | 89 | 0.03 |
| ID | BLAINE | 13,552 | . | . | . | . | 52 | . |
| ID | BONNER | 26,622 | . | . | . | . | 78 | . |
| ID | BONNEVILLE | 72,207 | . | . | . | . | 76 | . |
| ID | BUTTE | 2,918 | . | . | . | 0.081 | . | . |
| ID | CANYON | 90,076 | . | . | . | . | 74 | . |
| ID | CARIBOU | 6,963 | . | . | . | . | 72 | . |
| ID | KOOTENAI | 69,795 | . | . | . | . | 76 | . |
| ID | LEMHI | 6,899 | . | . | . | . | 100 | . |
| ID | LEWIS | 3,516 | . | . | . | . | 63 | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|-------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| ID | MADISON | 23,674 | . | . | . | . | 67 | . |
| ID | MINIDOKA | 19,361 | . | . | . | . | 62 | . |
| ID | NEZ PERCE | 33,754 | 5.9 | . | . | . | 63 | . |
| ID | SHOSHONE | 13,931 | . | 0.1 | . | . | 101 | . |
| ID | TWIN FALLS | 53,580 | . | . | . | . | 64 | . |
| IL | ADAMS | 66,090 | . | . | . | 0.099 | 41 | 0.03 |
| IL | CHAMPAIGN | 173,025 | . | . | . | 0.094 | 39 | 0.013 |
| IL | COLES | 51,644 | . | . | . | . | 44 | . |
| IL | COOK | 5,105,067 | 4.9 | 0.54 | 0.032 | 0.117 | 122 | 0.032 |
| IL | DU PAGE | 781,666 | . | 0.05 | . | 0.087 | 56 | . |
| IL | EFFINGHAM | 31,704 | . | . | . | 0.097 | . | . |
| IL | JACKSON | 61,067 | . | . | . | . | 37 | . |
| IL | JERSEY | 20,539 | . | . | . | 0.102 | . | . |
| IL | KANE | 317,471 | . | . | . | 0.096 | . | . |
| IL | LAKE | 516,418 | . | . | 0.008 | 0.125 | . | . |
| IL | LA SALLE | 106,913 | . | . | . | . | 111 | . |
| IL | MC HENRY | 183,241 | . | . | . | 0.094 | . | . |
| IL | MACON | 117,206 | . | 0.02 | . | 0.1 | 53 | 0.022 |
| IL | MACOUPIN | 47,679 | 0.7 | 0.01 | . | 0.102 | 39 | 0.012 |
| IL | MADISON | 249,238 | 2.5 | 3.1 | . | 0.127 | 107 | 0.102 |
| IL | PEORIA | 182,827 | 4.6 | 0.02 | . | 0.091 | 43 | 0.047 |
| IL | RANDOLPH | 34,583 | . | . | . | 0.093 | 89 | 0.06 |
| IL | ROCK ISLAND | 148,723 | . | 0.02 | . | 0.081 | 48 | . |
| IL | ST CLAIR | 262,852 | . | 0.11 | 0.0202 | 0.089 | 63 | . |
| IL | SANGAMON | 178,386 | 3 | . | . | 0.098 | 26 | 0.061 |
| IL | TAZEWELL | 123,692 | . | . | . | . | 44 | . |
| IL | WABASH | 13,111 | . | . | . | . | 44 | 0.043 |
| IL | WILL | 357,313 | 0.9 | 0.02 | 0.009 | 0.093 | 47 | 0.023 |
| IL | WINNEBAGO | 252,913 | 3.2 | 0.05 | . | 0.089 | 36 | . |
| IN | ALLEN | 300,836 | 2.7 | 0.02 | . | 0.105 | 70 | . |
| IN | CLARK | 87,777 | . | . | . | 0.098 | 54 | . |
| IN | DAVIESS | 27,533 | . | . | . | . | 0.05 | . |
| IN | DEARBORN | 38,835 | . | . | . | . | 0.045 | . |
| IN | DE KALB | 35,324 | 0.7 | 0 | 0.0074 | 0.082 | 80 | . |
| IN | DELAWARE | 119,659 | . | 0.94 | . | . | . | . |
| IN | DUBOIS | 36,616 | . | . | . | . | 52 | . |
| IN | ELKHART | 156,198 | . | . | . | 0.115 | . | . |
| IN | FLOYD | 64,404 | . | . | . | 0.119 | . | 0.038 |
| IN | FOUNTAIN | 17,808 | . | . | . | . | 0.037 | . |
| IN | GIBSON | 31,913 | . | . | . | . | 0.076 | . |
| IN | HAMILTON | 108,936 | . | . | . | 0.116 | . | . |
| IN | HANCOCK | 45,527 | . | . | . | 0.12 | . | . |
| IN | JASPER | 24,960 | . | . | . | . | 41 | 0.012 |
| IN | JEFFERSON | 29,797 | . | . | . | . | . | 0.013 |
| IN | KNOX | 39,884 | . | . | . | 0.103 | . | . |
| IN | LAKE | 475,594 | 3.7 | 0.21 | 0.0208 | 0.113 | 95 | 0.031 |
| IN | LA PORTE | 107,066 | . | . | . | 0.128 | . | . |
| IN | MADISON | 130,669 | . | . | . | 0.121 | 46 | . |
| IN | MARION | 797,159 | 3.1 | 0.16 | 0.0179 | 0.121 | 71 | 0.041 |
| IN | MORGAN | 55,920 | . | . | . | . | 0.027 | . |
| IN | PIKE | 12,509 | . | . | . | . | 0.054 | . |
| IN | PORTER | 128,932 | . | . | . | 0.132 | 208 | 0.026 |
| IN | POSEY | 25,968 | . | . | . | 0.064 | . | 0.04 |
| IN | ST JOSEPH | 247,052 | 2.5 | . | 0.0155 | 0.11 | 45 | . |
| IN | SPENCER | 19,490 | . | . | . | . | 0.03 | . |
| IN | SULLIVAN | 18,993 | . | . | . | . | 0.022 | . |
| IN | TIPPECANOE | 130,598 | 1.1 | . | 0.0126 | . | 34 | 0.02 |
| IN | VANDERBURGH | 165,058 | 4.1 | . | 0.0117 | 0.105 | 45 | 0.04 |
| IN | VERMILLION | 16,773 | . | . | . | . | 44 | . |
| IN | VIGO | 106,107 | 2.6 | . | . | 0.112 | 53 | 0.039 |
| IN | WARRICK | 44,920 | . | . | . | 0.115 | . | 0.097 |
| IN | WAYNE | 71,951 | . | . | . | . | . | 0.036 |
| IA | BLACK HAWK | 123,798 | . | . | . | . | 59 | . |
| IA | CERRO GORDO | 46,733 | . | . | . | . | 151 | . |
| IA | CLINTON | 51,040 | . | . | . | . | 78 | 0.042 |
| IA | DELAWARE | 18,035 | . | . | . | . | 45 | . |
| IA | DUBUQUE | 86,403 | . | . | . | . | . | 0.022 |
| IA | EMMET | 11,569 | . | . | . | . | 39 | . |
| IA | LEE | 38,687 | . | . | . | . | . | 0.045 |
| IA | LINN | 168,767 | 7.8 | . | . | 0.073 | 65 | 0.2 |
| IA | MUSCATINE | 39,907 | . | . | . | . | 72 | 0.086 |
| IA | POLK | 327,140 | 4 | . | . | 0.082 | 130 | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|----------------------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| IA | POTTAWATTAMIE | 82,628 | . | 0.37 | . | 0.09 | 153 | 0.024 |
| IA | SCOTT | 150,979 | . | . | . | 49 | . | . |
| IA | UNION | 12,750 | . | . | . | . | . | . |
| IA | VAN BUREN | 7,676 | . | . | . | 0.082 | 95 | . |
| IA | WOODBURY | 98,276 | . | . | . | . | . | . |
| KS | CLOUD | 11,023 | . | 0.01 | . | . | 48 | . |
| KS | FORD | 27,463 | . | 0.01 | . | . | 48 | . |
| KS | GREELEY | 1,774 | . | 0.01 | . | . | 102 | . |
| KS | JOHNSON | 355,054 | . | 0.01 | . | . | 67 | . |
| KS | KEARNEY | 4,027 | . | . | . | . | 69 | . |
| KS | MIAMI | 23,466 | . | . | . | 0.1 | . | . |
| KS | MORTON | 3,480 | . | 0.01 | . | . | 81 | . |
| KS | PAWNEE | 7,555 | 0.3 | . | . | 0.08 | . | 0.001 |
| KS | SEDWICK | 403,662 | 6.4 | 0.02 | . | 0.095 | 119 | 0.007 |
| KS | SHAWNEE | 160,976 | . | 0.01 | . | . | 58 | . |
| KS | SHERMAN | 6,926 | 0.3 | 0.01 | . | 0.05 | 74 | 0.001 |
| KS | WYANDOTTE | 161,993 | 2.7 | 0.07 | 0.0216 | 0.106 | 120 | 0.057 |
| KY | BELL | 31,506 | 3.5 | . | . | 0.092 | 47 | . |
| KY | BOONE | 57,589 | . | . | . | 0.101 | . | . |
| KY | BOYD | 51,150 | 3.7 | . | 0.013 | 0.102 | 86 | 0.057 |
| KY | BULLITT | 47,567 | . | . | 0.0133 | 0.11 | 49 | . |
| KY | CAMPBELL | 83,866 | . | . | 0.0185 | 0.115 | 62 | 0.029 |
| KY | CHRISTIAN | 68,941 | . | . | . | 0.1 | 39 | 0.019 |
| KY | DAVIESS | 87,189 | 2.7 | . | 0.0114 | 0.107 | 59 | 0.02 |
| KY | EDMONSON | 10,357 | . | . | . | 0.107 | . | . |
| KY | FAYETTE | 225,366 | 3.1 | . | 0.0137 | 0.096 | 60 | 0.02 |
| KY | FLOYD | 43,586 | . | . | . | . | 50 | . |
| KY | GRAVES | 33,550 | . | . | . | 0.086 | . | . |
| KY | GREENUP | 36,742 | . | 0.02 | . | 0.097 | . | 0.023 |
| KY | HANCOCK | 7,864 | . | . | . | 0.11 | . | 0.025 |
| KY | HARDIN | 89,240 | . | . | . | 0.093 | 49 | . |
| KY | HARLAN | 36,574 | . | . | . | . | 51 | . |
| KY | HENDERSON | 43,044 | 2 | . | 0.0173 | 0.108 | 59 | 0.041 |
| KY | JEFFERSON | 664,937 | 5.6 | 0.02 | 0.0202 | 0.121 | 61 | 0.03 |
| KY | JESSAMINE | 30,508 | . | . | . | 0.082 | . | . |
| KY | KENTON | 142,031 | 3.3 | . | 0.0192 | 0.112 | 56 | . |
| KY | LAWRENCE | 13,998 | . | . | . | 0.082 | 54 | 0 |
| KY | LIVINGSTON | 9,062 | . | . | . | 0.105 | 51 | 0.021 |
| KY | MC CRACKEN | 62,879 | 3.2 | . | 0.0116 | 0.087 | 61 | . |
| KY | MC LEAN | 9,628 | . | . | . | 0.094 | . | . |
| KY | MADISON | 57,508 | . | . | . | . | 53 | . |
| KY | MARSHALL | 27,205 | . | . | . | . | 54 | . |
| KY | OLDHAM | 33,263 | . | . | . | 0.109 | . | . |
| KY | PERRY | 30,283 | . | . | . | 0.09 | 43 | . |
| KY | PIKE | 72,583 | . | . | . | 0.087 | 37 | . |
| KY | PULASKI | 49,489 | . | . | . | 0.083 | 55 | . |
| KY | SCOTT | 23,867 | . | . | . | 0.095 | . | . |
| KY | SIMPSON | 15,145 | . | . | 0.0141 | 0.094 | . | . |
| KY | TRIGG | 10,361 | . | . | . | 0.101 | . | . |
| KY | WARREN | 76,673 | . | . | . | . | 46 | . |
| KY | WHITEY | 33,326 | . | . | . | . | 44 | . |
| KY | WOODFORD | 19,955 | . | 0.04 | . | . | . | . |
| LA | ASCENSION PARISH | 58,214 | . | . | . | 0.121 | . | . |
| LA | BEAUREGARD PARISH | 30,083 | . | . | 0.0054 | 0.092 | . | . |
| LA | BOSSIER PARISH | 86,088 | . | . | . | 0.096 | 44 | 0.004 |
| LA | CADDY PARISH | 248,253 | . | . | . | 0.1 | 47 | . |
| LA | CALCASIEU PARISH | 168,134 | . | . | 0.0056 | 0.101 | 33 | 0.018 |
| LA | EAST BATON ROUGE PARISH | 380,105 | 4.7 | 0.15 | 0.0208 | 0.118 | . | . |
| LA | GRANT PARISH | 17,526 | . | . | . | 0.085 | . | . |
| LA | IBERVILLE PARISH | 31,049 | . | . | 0.0105 | 0.139 | 42 | . |
| LA | JEFFERSON PARISH | 448,306 | . | . | 0.0118 | 0.1 | . | . |
| LA | LAFAYETTE PARISH | 164,762 | . | . | . | 0.098 | 25 | . |
| LA | LAFOURCHE PARISH | 85,860 | . | . | . | 0.094 | . | . |
| LA | LIVINGSTON PARISH | 70,526 | . | . | 0.0051 | 0.116 | . | . |
| LA | ORLEANS PARISH | 496,938 | 4 | 0.02 | 0.0178 | 0.091 | 44 | . |
| LA | OUACHITA PARISH | 142,191 | . | . | . | 0.089 | 76 | 0.007 |
| LA | POINTE COUPEE PARISH | 22,540 | . | . | 0.0068 | 0.102 | . | . |
| LA | RAPIDES PARISH | 131,556 | . | . | . | . | 42 | . |
| LA | ST BERNARD PARISH | 66,631 | . | . | . | 0.105 | . | . |
| LA | ST CHARLES PARISH | 42,437 | . | . | . | 0.102 | 64 | . |
| LA | ST JAMES PARISH | 20,879 | . | . | 0.0133 | 0.113 | . | . |
| LA | ST JOHN THE BAPTIST PARISH | 39,996 | . | 0.09 | . | . | . | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|-------------------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| LA | ST MARY PARISH | 58,086 | . | . | 0.092 | . | . | . |
| LA | WEST BATON ROUGE PARISH | 19,419 | . | 0.03 | 0.0153 | 0.114 | . | . |
| ME | ANDROSCOGGIN | 105,259 | . | . | . | . | 37 | 0.018 |
| ME | AROSTOOK | 86,936 | . | . | . | . | 104 | 0.04 |
| ME | CUMBERLAND | 243,135 | . | . | 0.1 | 61 | . | 0.021 |
| ME | FRANKLIN | 29,008 | . | . | . | . | 39 | . |
| ME | HANCOCK | 46,948 | . | . | 0.001 | 0.1 | 51 | . |
| ME | KENNEBEC | 115,904 | . | . | 0.096 | 64 | . | . |
| ME | KNOX | 36,310 | . | . | 0.104 | 39 | . | . |
| ME | OXFORD | 52,602 | . | . | 0.079 | 41 | . | 0.013 |
| ME | PENOBSQUIT | 146,601 | . | . | 0.082 | 70 | . | 0.02 |
| ME | PISCATAQUIS | 18,653 | . | . | 0.07 | . | . | . |
| ME | SAGADAHOC | 33,535 | . | . | 0.108 | . | . | . |
| ME | SOMERSET | 49,767 | . | . | 0.093 | 26 | . | . |
| ME | YORK | 164,587 | . | . | 0.0106 | 0.104 | 37 | . |
| MD | ALLEGANY | 74,946 | . | . | . | . | 47 | 0.019 |
| MD | ANNE ARUNDEL | 427,239 | . | . | 0.126 | 44 | . | . |
| MD | BALTIMORE | 692,134 | 3 | . | 0.019 | 0.122 | 44 | . |
| MD | CALVERT | 51,372 | . | . | 0.094 | . | . | . |
| MD | CARROLL | 123,372 | . | . | 0.113 | . | . | . |
| MD | CECIL | 71,347 | . | . | 0.119 | 41 | . | . |
| MD | CHARLES | 101,154 | . | . | 0.099 | . | . | . |
| MD | GARRETT | 28,138 | . | . | . | . | 61 | . |
| MD | HARFORD | 182,132 | . | . | 0.0092 | 0.131 | . | . |
| MD | KENT | 17,842 | . | . | 0.107 | . | . | . |
| MD | MONTGOMERY | 757,027 | 3 | . | 0.108 | . | . | . |
| MD | PRINCE GEORGES | 729,268 | 4.5 | . | 0.116 | 50 | . | . |
| MD | WICOMICO | 74,339 | . | . | . | . | 34 | . |
| MD | BALTIMORE | 736,014 | 4.2 | 0.03 | 0.0269 | 0.108 | 75 | 0.024 |
| MA | BARNSTABLE | 186,605 | . | . | 0.124 | . | . | . |
| MA | BERKSHIRE | 139,352 | . | . | 0.108 | . | . | . |
| MA | BRISTOL | 506,325 | . | . | 0.0075 | 0.118 | 44 | 0.043 |
| MA | ESSEX | 670,080 | . | . | 0.0157 | 0.105 | 34 | 0.027 |
| MA | HAMPDEN | 456,310 | 7.7 | . | 0.0238 | 0.108 | 67 | 0.028 |
| MA | HAMPSHIRE | 146,568 | . | . | 0.0074 | 0.11 | 40 | 0.017 |
| MA | MIDDLESEX | 1,398,468 | 4.5 | . | 0.102 | 51 | . | 0.032 |
| MA | NORFOLK | 616,087 | . | . | . | . | 55 | . |
| MA | PLYMOUTH | 435,276 | . | . | 0.088 | . | . | . |
| MA | SUFFOLK | 663,906 | 4.7 | . | 0.031 | 0.089 | 80 | 0.037 |
| MA | WORCESTER | 709,705 | 5.3 | . | 0.0193 | 0.091 | 46 | 0.021 |
| MI | ALLEGAN | 90,509 | . | . | 0.0091 | 0.123 | . | . |
| MI | BENZIE | 12,200 | . | . | . | 0.108 | . | . |
| MI | BERRIEN | 161,378 | . | . | . | 0.125 | . | . |
| MI | CALHOUN | 135,982 | . | . | . | . | 57 | . |
| MI | CASS | 49,477 | . | . | . | 0.115 | . | . |
| MI | CLINTON | 57,883 | . | . | . | 0.077 | . | . |
| MI | DELTA | 37,780 | . | . | . | . | . | 0.011 |
| MI | GENESEE | 430,459 | . | 0.01 | . | 0.113 | 45 | 0.012 |
| MI | HURON | 34,951 | . | . | . | 0.098 | . | . |
| MI | INGHAM | 281,912 | . | . | . | 0.096 | . | . |
| MI | KALAMAZOO | 223,411 | 1.5 | 0.01 | 0.0114 | 0.102 | 33 | 0.011 |
| MI | KENT | 500,631 | 3.3 | 0.01 | . | 0.127 | 71 | 0.011 |
| MI | LENAWEE | 91,476 | . | . | . | 0.104 | . | . |
| MI | MACOMB | 717,400 | 2.8 | . | 0.012 | 0.108 | . | 0.022 |
| MI | MARQUETTE | 70,887 | . | . | . | . | 78 | . |
| MI | MASON | 25,537 | . | . | . | 0.128 | . | . |
| MI | MECOSTA | 37,308 | . | . | . | 0.11 | . | . |
| MI | MONROE | 133,600 | . | . | . | . | 45 | . |
| MI | MUSKEGON | 158,983 | . | 0.01 | . | 0.123 | . | . |
| MI | OAKLAND | 1,083,592 | 2.6 | . | . | 0.09 | . | . |
| MI | OTTAWA | 187,768 | . | . | . | 0.113 | . | . |
| MI | ROSCOMMON | 19,776 | . | . | . | 0.099 | . | . |
| MI | ST CLAIR | 145,607 | . | . | . | 0.113 | . | . |
| MI | VAN BUREN | 70,060 | . | 0.01 | 0.0083 | . | . | . |
| MI | WASHTENAW | 282,937 | . | . | . | 0.099 | . | . |
| MI | WAYNE | 2,111,687 | 6.2 | 0.04 | 0.0214 | 0.098 | 106 | 0.079 |
| MN | ANOKA | 243,641 | . | . | . | 0.078 | . | . |
| MN | CARLTON | 29,259 | . | . | . | . | 27 | . |
| MN | DAKOTA | 275,227 | 1.1 | 0.55 | 0.0157 | 0.081 | . | 0.024 |
| MN | DOUGLAS | 28,674 | . | . | . | . | 6 | . |
| MN | GOODHUE | 40,690 | . | . | . | . | 19 | . |
| MN | HENNEPIN | 1,032,431 | 4.7 | 0.01 | 0.0281 | . | 91 | 0.013 |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|-----------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| MN | KOOCHICHING | 16,299 | . | . | . | 0.074 | 22 | 0.011 |
| MN | LAKE | 10,415 | . | . | . | 0.074 | . | . |
| MN | MORRISON | 29,604 | . | . | . | . | 24 | . |
| MN | OLMSTED | 106,470 | . | . | . | . | 44 | 0.016 |
| MN | PINE | 21,264 | . | . | . | . | 13 | . |
| MN | PIPESTONE | 10,491 | . | . | . | . | 21 | . |
| MN | RAMSEY | 485,765 | 7.3 | 0.01 | 0.0193 | . | 89 | 0.01 |
| MN | ST LOUIS | 198,213 | 4.5 | . | . | 0.074 | 58 | . |
| MN | SHERBURNE | 41,945 | . | . | . | . | 38 | 0.011 |
| MN | STEARNS | 118,791 | 4 | . | . | . | . | . |
| MN | WASHINGTON | 145,896 | . | . | . | 0.09 | 48 | 0.041 |
| MN | WRIGHT | 68,710 | . | . | 0.0083 | . | . | 0.007 |
| MS | ADAMS | 35,356 | . | . | . | 0.094 | . | . |
| MS | CHOCTAW | 9,071 | 1.2 | 0.01 | 0.0043 | 0.055 | 14 | 0.006 |
| MS | COAHOMA | 31,665 | . | . | . | . | 37 | . |
| MS | DE SOTO | 67,910 | . | . | . | 0.145 | . | . |
| MS | HANCOCK | 31,760 | . | . | . | 0.104 | . | . |
| MS | HARRISON | 165,365 | . | . | . | . | . | 0.043 |
| MS | HINDS | 254,441 | 4.8 | . | . | 0.097 | 55 | 0.008 |
| MS | JACKSON | 115,243 | . | . | . | 0.101 | 33 | 0.017 |
| MS | JONES | 62,031 | . | . | . | . | 44 | . |
| MS | LAUDERDALE | 75,555 | . | . | . | 0.091 | . | . |
| MS | LEE | 65,581 | . | . | . | 0.086 | . | . |
| MS | MADISON | 53,794 | . | . | . | 0.088 | . | . |
| MS | SHARKEY | 7,066 | . | . | . | 0.09 | . | . |
| MS | WARREN | 47,880 | . | . | . | 0.097 | 40 | . |
| MS | WASHINGTON | 67,935 | . | . | . | . | 39 | . |
| MO | AUDRAIN | 23,599 | . | . | . | . | 40 | . |
| MO | BUCHANAN | 83,083 | . | . | . | . | 126 | 0.079 |
| MO | CHRISTIAN | 32,644 | . | . | . | . | 148 | . |
| MO | CLAY | 153,411 | 4.4 | . | 0.0132 | 0.114 | . | 0.009 |
| MO | GREENE | 207,949 | 3.3 | . | 0.0113 | 0.095 | 101 | 0.089 |
| MO | HOLT | 6,034 | . | 0.82 | . | . | . | . |
| MO | HOWELL | 31,447 | . | . | . | . | 1321 | . |
| MO | IRON | 10,726 | . | 9.89 | . | . | . | 0.084 |
| MO | JACKSON | 633,232 | 3.8 | 0.01 | 0.0178 | 0.094 | 73 | 0.033 |
| MO | JEFFERSON | 171,380 | . | 5.74 | . | 0.113 | 43 | 0.078 |
| MO | MARION | 27,682 | . | . | . | . | 34 | . |
| MO | MONROE | 9,104 | . | . | . | 0.098 | 35 | 0.01 |
| MO | PLATTE | 57,867 | . | . | 0.0124 | 0.092 | . | 0.008 |
| MO | ST CHARLES | 212,907 | . | . | 0.0107 | 0.122 | 41 | . |
| MO | STE GENEVIEVE | 16,037 | . | . | 0.004 | 0.122 | 47 | . |
| MO | ST LOUIS | 993,529 | 4.2 | 0.03 | 0.0218 | 0.11 | 57 | . |
| MO | TANEY | 25,561 | 1.1 | . | . | . | . | . |
| MO | ST LOUIS | 396,685 | 6.4 | . | 0.0248 | 0.116 | 85 | 0.04 |
| MT | BIG HORN | 11,337 | . | . | . | . | 103 | . |
| MT | BROADWATER | 3,318 | . | . | . | . | 61 | 0.014 |
| MT | CASCADE | 77,691 | 5.4 | . | . | . | 59 | 0.02 |
| MT | FERGUS | 12,083 | . | . | . | . | 38 | . |
| MT | FLATHEAD | 59,218 | 11.1 | . | . | 0.064 | 91 | . |
| MT | GALLATIN | 50,463 | . | . | . | . | 74 | . |
| MT | GLACIER | 12,121 | . | . | . | . | 54 | . |
| MT | JEFFERSON | 7,939 | . | . | . | . | 34 | 0.055 |
| MT | LAKE | 21,041 | . | . | . | . | 122 | . |
| MT | LEWIS AND CLARK | 47,495 | . | 3.12 | . | . | . | . |
| MT | LINCOLN | 17,481 | . | . | . | . | 94 | . |
| MT | MADISON | 5,989 | . | . | . | . | 30 | . |
| MT | MISSOULA | 78,687 | 5.6 | . | . | . | 112 | . |
| MT | PARK | 14,562 | . | . | . | . | 48 | . |
| MT | PHILLIPS | 5,163 | . | . | . | . | 30 | . |
| MT | RAVALLI | 25,010 | . | . | . | . | 69 | . |
| MT | ROOSEVELT | 10,999 | . | . | . | . | 53 | . |
| MT | ROSEBUD | 10,505 | . | . | 0.0057 | . | 120 | 0.011 |
| MT | SANDERS | 8,669 | . | . | . | . | 109 | . |
| MT | SILVER BOW | 33,941 | . | . | . | . | 90 | . |
| MT | STILLWATER | 6,536 | . | . | . | . | 35 | . |
| MT | YELLOWSTONE | 113,419 | 7.1 | . | . | . | 75 | 0.099 |
| NE | ADAMS | 29,625 | . | . | . | . | 60 | . |
| NE | BUFFALO | 37,447 | . | . | . | . | 74 | . |
| NE | CASS | 21,318 | . | . | . | . | 145 | . |
| NE | DAWSON | 19,940 | . | . | . | . | 99 | . |
| NE | DOUGLAS | 416,444 | 6.9 | 5.06 | . | 0.074 | 81 | 0.051 |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|--------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| NE | LANCASTER | 213,641 | 4.7 | . | . | 0.06 | 63 | . |
| NE | OTOE | 14,252 | . | . | . | . | 41 | . |
| NE | SCOTTS BLUFF | 36,025 | . | . | . | . | 51 | . |
| NV | CHURCHILL | 17,938 | . | . | . | . | 61 | . |
| NV | CLARK | 741,459 | 10.1 | . | 0.0271 | 0.096 | 328 | . |
| NV | DOUGLAS | 27,637 | 2.1 | . | 0.0101 | 0.083 | 82 | . |
| NV | ELKO | 33,530 | . | . | . | . | 107 | . |
| NV | LANDER | 6,266 | . | . | . | . | 143 | . |
| NV | PERSHING | 4,336 | . | . | . | . | 144 | . |
| NV | WASHOE | 254,667 | 7.6 | . | . | 0.096 | 131 | . |
| NV | WHITE PINE | 9,264 | . | . | . | 0.081 | 55 | . |
| NV | CARSON CITY | 40,443 | . | . | . | . | 52 | . |
| NH | BELKNAP | 49,216 | . | . | . | 0.088 | . | . |
| NH | CARROLL | 35,410 | . | . | . | 0.079 | . | . |
| NH | CHESHIRE | 70,121 | . | . | . | 0.091 | 46 | 0.024 |
| NH | COOS | 34,828 | . | . | . | . | 61 | 0.045 |
| NH | GRAFTON | 74,929 | . | . | . | 0.07 | . | . |
| NH | HILLSBOROUGH | 336,073 | 7.6 | . | 0.0192 | 0.103 | 44 | 0.026 |
| NH | MERRIMACK | 120,005 | . | . | . | 0.095 | 38 | 0.033 |
| NH | ROCKINGHAM | 245,845 | . | . | 0.0125 | 0.107 | 42 | 0.015 |
| NH | STRAFFORD | 104,233 | . | . | . | 0.098 | 38 | . |
| NH | SULLIVAN | 38,592 | . | . | . | 0.09 | 37 | 0.017 |
| NJ | ATLANTIC | 224,327 | 3.6 | 0.01 | . | 0.108 | 40 | 0.014 |
| NJ | BERGEN | 825,380 | 4 | . | 0.0278 | 0.106 | 61 | 0.026 |
| NJ | BURLINGTON | 395,066 | 4.6 | . | . | . | . | 0.023 |
| NJ | CAMDEN | 502,824 | 5 | 0.08 | 0.0235 | 0.125 | 65 | 0.027 |
| NJ | CUMBERLAND | 138,053 | . | . | . | 0.105 | . | 0.016 |
| NJ | ESSEX | 778,206 | 3.8 | 0.07 | 0.0322 | 0.115 | 67 | 0.027 |
| NJ | GLOUCESTER | 230,082 | . | . | . | 0.118 | 43 | 0.024 |
| NJ | HUDSON | 553,099 | 6.7 | 0.03 | 0.0272 | 0.12 | 83 | 0.03 |
| NJ | HUNTERDON | 107,776 | . | . | . | 0.108 | . | . |
| NJ | MERCER | 325,824 | . | . | 0.0169 | 0.121 | 59 | . |
| NJ | MIDDLESEX | 671,780 | 3.3 | 0.06 | 0.0203 | 0.125 | 46 | 0.024 |
| NJ | MONMOUTH | 553,124 | 4.6 | . | . | 0.123 | . | . |
| NJ | MORRIS | 421,353 | 5.4 | . | 0.0114 | 0.114 | . | 0.023 |
| NJ | OCEAN | 433,203 | 4.2 | . | . | 0.118 | . | . |
| NJ | PASSAIC | 453,060 | . | 0 | . | . | 48 | . |
| NJ | SALEM | 65,294 | . | 0.02 | . | . | . | . |
| NJ | UNION | 493,819 | 6 | . | 0.0412 | 0.111 | 60 | 0.03 |
| NJ | WARREN | 91,607 | . | . | . | . | 53 | . |
| NM | BERNALILLO | 480,577 | 7.1 | . | 0.022 | 0.098 | 94 | . |
| NM | CHAVES | 57,849 | . | . | . | . | 37 | . |
| NM | CIBOLA | 23,794 | . | . | . | . | 18 | . |
| NM | DONA ANA | 135,510 | 4.3 | 0.07 | 0.009 | 0.124 | 143 | . |
| NM | EDDY | 48,605 | . | . | 0.0051 | . | . | 0.007 |
| NM | GRANT | 27,676 | . | . | . | . | 40 | 0.02 |
| NM | HIDALGO | 5,958 | . | . | . | . | 35 | 0.022 |
| NM | LEA | 55,765 | . | . | . | . | 35 | . |
| NM | LUNA | 18,110 | . | . | . | . | 49 | . |
| NM | MC KINLEY | 60,686 | . | . | . | . | 34 | . |
| NM | OTERO | 51,928 | . | . | . | . | 70 | . |
| NM | SANDOVAL | 63,319 | 1.4 | . | 0.0077 | 0.088 | 39 | . |
| NM | SAN JUAN | 91,605 | 2.9 | . | 0.0068 | . | 31 | . |
| NM | SANTA FE | 98,928 | 2.2 | . | . | . | 33 | . |
| NM | TAOS | 23,118 | . | . | . | . | 103 | . |
| NM | VALENCIA | 45,235 | . | . | . | 0.079 | . | . |
| NY | ALBANY | 292,594 | . | 0.03 | 0.0146 | 0.105 | 45 | 0.025 |
| NY | BRONX | 1,203,789 | 3.3 | . | 0.0355 | 0.122 | 55 | 0.055 |
| NY | BROOME | 212,160 | . | . | . | . | 34 | . |
| NY | CHAUTAUQUA | 141,895 | . | . | . | 0.097 | 33 | 0.039 |
| NY | CHEMUNG | 95,195 | . | . | . | 0.088 | 24 | 0.016 |
| NY | DUTCHESS | 259,462 | . | . | . | 0.109 | . | . |
| NY | ERIE | 968,532 | 3.7 | 0.03 | 0.0224 | 0.091 | 39 | 0.041 |
| NY | ESSEX | 37,152 | . | . | . | 0.093 | 25 | 0.009 |
| NY | GREENE | 44,739 | . | . | . | . | 49 | . |
| NY | HAMILTON | 5,279 | . | . | . | 0.076 | . | 0.008 |
| NY | HERKIMER | 65,797 | . | . | . | 0.073 | 30 | 0.009 |
| NY | JEFFERSON | 110,943 | . | . | . | 0.084 | . | . |
| NY | KINGS | 2,300,664 | 6.1 | 0.16 | 0.0347 | 0.114 | 57 | 0.038 |
| NY | MADISON | 69,120 | . | . | . | 0.082 | . | 0.015 |
| NY | MONROE | 713,968 | 3.9 | 0.04 | . | 0.083 | 54 | 0.041 |
| NY | NASSAU | 1,287,348 | 4.9 | . | 0.0258 | . | 55 | 0.031 |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|-------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| NY | NEW YORK | 1,487,536 | 6.3 | 0.06 | 0.0422 | . | 87 | . |
| NY | NIAGARA | 220,756 | 2.7 | 0.02 | . | 0.099 | 78 | 0.048 |
| NY | ONEIDA | 250,836 | . | . | . | 0.076 | 43 | . |
| NY | ONONDAGA | 468,973 | 3.9 | . | . | 0.088 | 61 | 0.012 |
| NY | ORANGE | 307,647 | . | 0.06 | . | 0.12 | . | . |
| NY | PUTNAM | 83,941 | . | . | . | 0.122 | 37 | 0.015 |
| NY | QUEENS | 1,951,598 | . | . | . | 0.108 | . | 0.035 |
| NY | RENSSELAER | 154,429 | . | . | . | . | 42 | 0.011 |
| NY | RICHMOND | 378,977 | . | 0.04 | . | 0.117 | 45 | 0.027 |
| NY | ROCKLAND | 265,475 | . | . | . | . | 50 | . |
| NY | SARATOGA | 181,276 | . | . | . | 0.091 | 45 | . |
| NY | SCHENECTADY | 149,285 | 3.7 | . | . | 0.085 | 48 | 0.021 |
| NY | STEUBEN | 99,088 | . | . | . | . | 26 | . |
| NY | SUFFOLK | 1,321,864 | . | . | . | 0.12 | 40 | 0.025 |
| NY | ULSTER | 165,304 | . | . | . | 0.095 | 51 | 0.011 |
| NY | WARREN | 59,209 | . | . | . | . | 40 | 0.013 |
| NY | WAYNE | 89,123 | . | . | . | 0.086 | . | . |
| NY | WESTCHESTER | 874,866 | . | . | . | 0.115 | . | . |
| NC | ALAMANCE | 108,213 | . | . | . | . | 50 | . |
| NC | ALEXANDER | 27,544 | . | . | . | 0.094 | 60 | 0.012 |
| NC | BEAUFORT | 42,283 | . | . | . | . | 33 | 0.024 |
| NC | BUNCOMBE | 174,821 | . | . | . | 0.084 | 76 | . |
| NC | CABARRUS | 98,935 | . | . | . | . | 46 | . |
| NC | CARTERET | 52,556 | . | . | . | 0.09 | . | . |
| NC | CASWELL | 20,693 | 0.4 | . | . | 0.108 | . | . |
| NC | CATAWBA | 118,412 | . | . | . | . | 50 | . |
| NC | CHATHAM | 38,759 | . | . | . | 0.1 | 37 | . |
| NC | COLUMBUS | 49,587 | . | . | . | . | . | 0.006 |
| NC | CUMBERLAND | 274,566 | 4.1 | . | . | 0.106 | 53 | 0.012 |
| NC | DAVIDSON | 126,677 | . | . | . | . | 49 | . |
| NC | DAVIE | 27,859 | . | . | . | 0.103 | . | . |
| NC | DUPLIN | 39,995 | . | . | . | 0.083 | . | 0.01 |
| NC | DURHAM | 181,835 | 5.4 | . | . | 0.103 | 46 | . |
| NC | EDGECOMBE | 56,558 | . | . | . | 0.091 | 39 | 0.01 |
| NC | FORSYTH | 265,878 | 4.3 | . | 0.0164 | 0.119 | 58 | 0.026 |
| NC | FRANKLIN | 36,414 | 0.8 | . | . | 0.107 | . | . |
| NC | GASTON | 175,093 | 3.6 | . | . | . | 52 | . |
| NC | GRANVILLE | 38,345 | 0.7 | . | . | 0.124 | 44 | . |
| NC | GUILFORD | 347,420 | 3.8 | . | . | 0.109 | 54 | . |
| NC | HALIFAX | 55,516 | . | . | . | . | 51 | . |
| NC | HARNETT | 67,822 | . | . | . | . | 45 | . |
| NC | HAYWOOD | 46,942 | . | . | . | 0.095 | 49 | . |
| NC | HENDERSON | 69,285 | . | . | . | . | 53 | . |
| NC | JOHNSTON | 81,306 | . | . | . | 0.102 | . | 0.01 |
| NC | LINCOLN | 50,319 | . | . | . | 0.1 | 50 | 0.013 |
| NC | MC DOWELL | 35,681 | . | . | . | . | 59 | . |
| NC | MACON | 23,499 | . | . | . | 0.08 | . | . |
| NC | MECKLENBURG | 511,433 | 5.1 | . | 0.0163 | 0.13 | 53 | 0.015 |
| NC | MICHELL | 14,433 | . | . | . | . | 59 | . |
| NC | NEW HANOVER | 120,284 | . | . | . | 0.09 | 46 | . |
| NC | NORTHAMPTON | 20,798 | . | . | . | . | . | 0.012 |
| NC | ONSLOW | 149,838 | . | . | . | . | 37 | . |
| NC | ORANGE | 93,851 | 5.1 | . | . | . | . | . |
| NC | PASQUOTANK | 31,298 | . | . | . | . | 33 | . |
| NC | PITT | 107,924 | . | . | . | 0.097 | 36 | . |
| NC | ROBESON | 105,179 | . | . | . | . | 53 | . |
| NC | ROCKINGHAM | 86,064 | . | . | . | 0.123 | . | . |
| NC | ROWAN | 110,605 | 0.8 | . | 0.008 | 0.133 | 47 | . |
| NC | SWAIN | 11,268 | . | . | . | 0.075 | 48 | 0.01 |
| NC | WAKE | 423,380 | 5.6 | . | . | 0.107 | 49 | . |
| NC | WATAUGA | 36,952 | . | . | . | . | 46 | . |
| NC | WAYNE | 104,666 | . | . | . | . | 43 | . |
| NC | WILSON | 66,061 | . | . | . | . | 41 | . |
| NC | YANCEY | 15,419 | . | . | . | 0.09 | . | 0.003 |
| ND | BILLINGS | 1,108 | . | . | . | . | . | 0.007 |
| ND | BURLEIGH | 60,131 | . | . | . | . | 27 | . |
| ND | CASS | 102,874 | . | . | 0.008 | 0.075 | 54 | 0.008 |
| ND | DUNN | 4,005 | . | . | . | . | . | 0.007 |
| ND | GRAND FORKS | 70,683 | . | . | . | . | 53 | . |
| ND | MC KENZIE | 6,383 | . | . | . | 0.063 | . | . |
| ND | MERCER | 9,808 | . | . | 0.0043 | 0.062 | 45 | 0.033 |
| ND | MORTON | 23,700 | . | . | . | . | . | 0.056 |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| ND | OLIVER | 2,381 | . | . | 0.003 | 0.063 | . | 0.013 |
| ND | STARK | 22,832 | . | . | . | . | 23 | . |
| ND | STEELE | 2,420 | . | . | 0.0027 | 0.068 | 38 | 0.006 |
| ND | WILLIAMS | 21,129 | . | . | . | . | 23 | 0.013 |
| OH | ADAMS | 25,371 | . | . | . | . | . | 0.026 |
| OH | ALLEN | 109,755 | . | . | . | 0.11 | 44 | 0.015 |
| OH | ASHTABULA | 99,821 | . | . | . | 0.105 | . | 0.022 |
| OH | ATHENS | 59,549 | . | . | . | . | 47 | . |
| OH | BELMONT | 71,074 | . | . | . | . | 86 | 0.057 |
| OH | BUTLER | 291,479 | . | 0.05 | . | 0.115 | 78 | 0.026 |
| OH | CLARK | 147,548 | . | . | . | 0.116 | . | 0.031 |
| OH | CLERMONT | 150,187 | . | . | . | 0.104 | . | 0.025 |
| OH | CLINTON | 35,415 | . | . | . | 0.118 | . | . |
| OH | COLUMBIANA | 108,276 | . | 0.04 | 0.0191 | . | 86 | 0.057 |
| OH | CUYAHOGA | 1,412,140 | 9.4 | 1.06 | 0.0259 | 0.108 | 123 | 0.049 |
| OH | FRANKLIN | 961,437 | 2.7 | 0.07 | . | 0.107 | 66 | 0.021 |
| OH | FULTON | 38,498 | . | 0.44 | . | . | . | . |
| OH | GREENE | 136,731 | . | . | . | . | 27 | . |
| OH | HAMILTON | 866,228 | 2.8 | 0.22 | 0.0285 | 0.107 | 72 | 0.036 |
| OH | HANCOCK | 65,536 | . | . | . | . | 44 | . |
| OH | JEFFERSON | 80,298 | 5.3 | . | 0.0197 | 0.094 | 126 | 0.055 |
| OH | KNOX | 47,473 | . | . | 0.113 | . | . | . |
| OH | LAKE | 215,499 | 1.9 | . | 0.117 | . | 42 | 0.037 |
| OH | LAWRENCE | 61,834 | . | . | 0.123 | . | 53 | 0.018 |
| OH | LICKING | 128,300 | . | . | 0.108 | . | 20 | . |
| OH | LOGAN | 42,310 | . | 0.26 | . | 0.097 | . | . |
| OH | LORAIN | 271,126 | . | . | . | 0.099 | 67 | 0.032 |
| OH | LUCAS | 462,361 | 2.6 | . | . | 0.113 | 69 | 0.049 |
| OH | MADISON | 37,068 | . | . | 0.107 | . | . | . |
| OH | MAHONING | 264,806 | . | . | 0.102 | . | 47 | 0.03 |
| OH | MEDINA | 122,354 | . | . | 0.096 | . | . | . |
| OH | MEIGS | 22,987 | . | . | . | . | . | 0.027 |
| OH | MIAMI | 93,182 | . | . | 0.11 | . | . | . |
| OH | MONROE | 15,497 | . | . | . | . | 66 | . |
| OH | MONTGOMERY | 573,809 | 3 | 0.05 | . | 0.112 | 66 | 0.022 |
| OH | MORGAN | 14,194 | . | . | . | . | . | 0.057 |
| OH | NOBLE | 11,336 | . | . | . | . | 48 | . |
| OH | OTTAWA | 40,029 | . | . | . | . | 38 | . |
| OH | PORTAGE | 142,585 | . | . | 0.107 | . | . | . |
| OH | PREBLE | 40,113 | . | . | 0.111 | . | . | . |
| OH | RICHLAND | 126,137 | . | . | . | . | 68 | . |
| OH | SANDUSKY | 61,963 | . | . | . | . | 79 | . |
| OH | SCIOTO | 80,327 | . | . | . | . | 60 | 0.023 |
| OH | SENECA | 59,733 | . | . | . | . | 58 | . |
| OH | STARK | 367,585 | 2.5 | . | . | 0.097 | 68 | 0.032 |
| OH | SUMMIT | 514,990 | 3.4 | 0.04 | . | 0.103 | 73 | 0.042 |
| OH | TRUMBULL | 227,813 | . | . | 0.107 | . | 43 | . |
| OH | TUSCARAWAS | 84,090 | . | . | . | . | . | 0.034 |
| OH | WARREN | 113,909 | . | . | 0.11 | . | . | . |
| OH | WASHINGTON | 62,254 | . | . | 0.105 | . | 78 | . |
| OH | WYANDOT | 22,254 | . | . | . | . | 66 | . |
| OK | CARTER | 42,919 | . | . | . | . | 52 | . |
| OK | CLEVELAND | 174,253 | 2.7 | . | 0.0132 | 0.088 | 56 | . |
| OK | COMANCHE | 111,486 | 1.6 | . | 0.0087 | 0.077 | 56 | . |
| OK | GARFIELD | 56,735 | . | . | 0.0094 | . | . | . |
| OK | GARVIN | 26,605 | . | . | . | . | . | 0.014 |
| OK | KAY | 48,056 | . | . | . | . | 70 | 0.02 |
| OK | MC CLAIN | 22,795 | . | . | . | 0.089 | . | . |
| OK | MAYES | 33,366 | . | . | . | . | 60 | . |
| OK | MUSKOGEE | 68,078 | . | . | 0.0085 | . | 91 | 0.021 |
| OK | OKLAHOMA | 599,611 | 7.9 | 0.01 | 0.0139 | 0.102 | 54 | 0.005 |
| OK | TULSA | 503,341 | 6.8 | 0.11 | 0.015 | 0.115 | 76 | 0.042 |
| OK | WOODWARD | 18,976 | . | . | . | . | 69 | . |
| OR | CLACKAMAS | 278,850 | . | . | . | 0.133 | 39 | . |
| OR | COLUMBIA | 37,557 | . | . | . | 0.094 | . | . |
| OR | DESCHUTES | 74,958 | 5.3 | . | . | . | 123 | . |
| OR | JACKSON | 146,389 | 6.6 | 0.02 | . | 0.101 | 82 | . |
| OR | JOSEPHINE | 62,649 | 6 | . | . | . | 62 | . |
| OR | KLAMATH | 57,702 | 4.8 | . | . | . | 86 | . |
| OR | LAKE | 7,186 | . | . | . | . | 68 | . |
| OR | LANE | 282,912 | 5.7 | 0.02 | . | 0.111 | 78 | . |
| OR | MARION | 228,483 | 7.1 | . | . | 0.117 | . | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|--------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| OR | MULTNOMAH | 583,887 | 6.5 | 0.02 | 0.0182 | . | 70 | . |
| OR | UMATILLA | 59,249 | . | . | . | . | 66 | . |
| OR | UNION | 23,598 | . | . | . | . | 121 | . |
| OR | YAMHILL | 65,551 | . | 0.11 | . | . | . | . |
| PA | ADAMS | 78,274 | . | . | . | 0.099 | . | . |
| PA | ALLEGHENY | 1,336,449 | 4.3 | 0.07 | 0.0303 | 0.113 | 123 | 0.07 |
| PA | BEAVER | 186,093 | 2.1 | 0.06 | 0.018 | 0.105 | 76 | 0.058 |
| PA | BERKS | 336,523 | 3.4 | 0.82 | 0.0219 | 0.11 | 66 | 0.037 |
| PA | BLAIR | 130,542 | 1.9 | . | 0.0134 | 0.101 | 60 | 0.033 |
| PA | BUCKS | 541,174 | 4.7 | . | 0.0211 | 0.12 | 58 | 0.028 |
| PA | CAMBRIA | 163,029 | 4.8 | 0.05 | 0.0175 | 0.098 | 63 | 0.034 |
| PA | CARBON | 56,846 | . | 0.08 | . | . | . | . |
| PA | CENTRE | 123,786 | . | . | . | 0.089 | . | . |
| PA | CHESTER | 376,396 | . | . | . | . | 69 | . |
| PA | DAUPHIN | 237,813 | 2.3 | 0.04 | 0.021 | 0.104 | 63 | . |
| PA | DELAWARE | 547,651 | . | 0.04 | 0.0214 | 0.117 | 69 | 0.025 |
| PA | ERIE | 275,572 | . | . | 0.0148 | 0.1 | 56 | 0.066 |
| PA | FRANKLIN | 121,082 | . | . | . | 0.096 | . | . |
| PA | LACKAWANNA | 219,039 | 3.5 | . | 0.0176 | 0.113 | 61 | 0.033 |
| PA | LANCASTER | 422,822 | 2.6 | 0.04 | 0.0172 | 0.101 | 69 | 0.021 |
| PA | LAWRENCE | 96,246 | 3.5 | . | 0.0237 | 0.097 | 91 | 0.034 |
| PA | LEHIGH | 291,130 | 3.2 | . | 0.0175 | 0.114 | 54 | 0.035 |
| PA | LUZERNE | 328,149 | 4.1 | . | 0.0176 | 0.105 | 60 | 0.023 |
| PA | LYCOMING | 118,710 | . | . | . | 0.082 | 46 | 0.028 |
| PA | MERCER | 121,003 | . | 0.07 | . | 0.103 | 52 | 0.029 |
| PA | MONTGOMERY | 678,111 | 2.9 | 0.04 | 0.0209 | 0.118 | 58 | 0.028 |
| PA | NORTHAMPTON | 247,105 | 3.1 | 0.04 | 0.0238 | 0.11 | 65 | 0.033 |
| PA | PERRY | 41,172 | . | . | 0.0083 | 0.09 | 39 | 0.02 |
| PA | PHILADELPHIA | 1,585,577 | 5.6 | 9.23 | 0.0339 | 0.13 | 356 | 0.063 |
| PA | SCHUYLKILL | 152,585 | 2.2 | . | . | . | 0.027 | . |
| PA | WARREN | 45,050 | . | . | . | . | 0.032 | . |
| PA | WASHINGTON | 204,584 | 2.5 | . | 0.0173 | 0.103 | 72 | 0.035 |
| PA | WESTMORELAND | 370,321 | . | 0.04 | . | 0.104 | 43 | . |
| PA | YORK | 339,574 | 2.8 | 0.07 | 0.0206 | 0.098 | 53 | 0.022 |
| RI | KENT | 161,135 | . | . | 0.0031 | 0.107 | 33 | . |
| RI | PROVIDENCE | 596,270 | 4.4 | . | 0.0249 | 0.112 | 83 | 0.032 |
| SC | ABBEVILLE | 23,862 | . | . | . | 0.083 | . | . |
| SC | AIKEN | 120,940 | . | 0 | . | 0.105 | 41 | . |
| SC | ANDERSON | 145,196 | . | 0.01 | . | 0.098 | 54 | . |
| SC | BARNWELL | 20,293 | . | . | . | 0.095 | 39 | . |
| SC | BEAUFORT | 86,425 | . | 0.01 | . | . | . | . |
| SC | BERKELEY | 128,776 | . | . | . | 0.099 | . | . |
| SC | CHARLESTON | 295,039 | 4.7 | 0.02 | 0.0102 | 0.099 | 54 | 0.021 |
| SC | CHEROKEE | 44,506 | . | . | . | 0.103 | . | . |
| SC | CHESTER | 32,170 | . | . | . | 0.095 | . | . |
| SC | DARLINGTON | 61,851 | . | . | . | 0.093 | . | . |
| SC | EDGEFIELD | 18,375 | . | . | . | 0.092 | . | . |
| SC | FAIRFIELD | 22,295 | . | . | . | . | 46 | . |
| SC | FLORENCE | 114,344 | . | 0.01 | . | . | . | . |
| SC | GEOGETOWN | 46,302 | . | 0.02 | . | . | 94 | 0.011 |
| SC | GREENVILLE | 320,167 | 4.6 | 0.01 | 0.0158 | . | 77 | 0.012 |
| SC | GREENWOOD | 59,567 | . | 0.01 | . | . | . | . |
| SC | LEXINGTON | 167,611 | . | . | . | . | 117 | 0.02 |
| SC | OCONEE | 57,494 | . | . | . | 0.082 | . | 0.008 |
| SC | PICKENS | 93,894 | . | . | . | 0.11 | . | . |
| SC | RICHLAND | 285,720 | 3.4 | 0.02 | 0.0126 | 0.099 | 115 | 0.011 |
| SC | SPARTANBURG | 226,800 | . | 0 | . | 0.11 | 50 | . |
| SC | SUMTER | 102,637 | . | 0.01 | . | . | . | . |
| SC | UNION | 30,337 | . | . | . | 0.091 | . | . |
| SC | WILLIAMSBURG | 36,815 | . | . | . | 0.085 | . | . |
| SC | YORK | 131,497 | . | 0.01 | . | 0.105 | 49 | . |
| SD | BROOKINGS | 25,207 | . | . | . | . | 64 | . |
| SD | MINNEHAHA | 123,809 | . | . | . | . | 53 | . |
| SD | PENNINGTON | 81,343 | . | . | . | . | 137 | . |
| TN | ANDERSON | 68,250 | . | . | . | 0.102 | . | 0.035 |
| TN | BENTON | 14,524 | . | . | . | . | 55 | . |
| TN | BLOUNT | 85,969 | . | . | . | 0.102 | 42 | 0.058 |
| TN | BRADLEY | 73,712 | . | . | 0.0137 | . | 42 | 0.036 |
| TN | COFFEE | 40,339 | . | . | 0.0068 | . | 32 | 0.014 |
| TN | DAVIDSON | 510,784 | 5 | 0.08 | 0.0119 | 0.11 | 66 | 0.022 |
| TN | DICKSON | 35,061 | . | 0.01 | 0.0078 | . | 47 | 0.006 |
| TN | GILES | 25,741 | . | . | . | 0.104 | 48 | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|--------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| TN | HAMILTON | 285,536 | . | . | . | 0.114 | 65 | . |
| TN | HARDIN | 22,633 | . | . | . | . | . | 0.018 |
| TN | HAWKINS | 44,565 | . | . | . | . | . | 0.052 |
| TN | HAYWOOD | 19,437 | . | . | . | 0.1 | . | . |
| IN | HENRY | 27,888 | . | . | . | . | 53 | . |
| TN | HUMPHREYS | 15,795 | . | . | . | 0.102 | 51 | 0.02 |
| TN | JEFFERSON | 33,016 | . | . | . | 0.125 | . | . |
| TN | KNOX | 335,749 | 3.3 | . | . | 0.114 | 66 | . |
| TN | LOUDON | 31,255 | 0.9 | . | 0.0141 | 0.112 | 43 | 0.024 |
| TN | MC MINN | 42,383 | . | . | 0.0143 | . | 60 | . |
| TN | MADISON | 77,982 | . | 0.02 | . | . | 45 | . |
| TN | MAURY | 54,812 | . | . | . | . | 51 | . |
| TN | MONTGOMERY | 100,498 | . | . | . | . | 56 | 0.023 |
| TN | POLK | 13,643 | . | . | . | . | . | 0.037 |
| TN | PUTNAM | 51,373 | . | . | 0.0065 | . | 39 | 0.008 |
| TN | ROANE | 47,227 | . | 0.17 | . | . | 53 | 0.021 |
| TN | RUTHERFORD | 118,570 | . | . | . | 0.092 | . | 0.006 |
| TN | SEVIER | 51,043 | . | . | . | 0.107 | . | . |
| TN | SHELBY | 826,330 | 6.5 | 2.81 | 0.0241 | 0.122 | 60 | 0.017 |
| TN | STEWART | 9,479 | . | . | . | . | . | 0.019 |
| TN | SULLIVAN | 143,596 | 3 | 0.13 | 0.0176 | 0.104 | 67 | 0.05 |
| TN | SUMNER | 103,281 | . | . | . | 0.119 | . | 0.076 |
| TN | UNION | 13,694 | . | . | . | . | 78 | . |
| TN | WASHINGTON | 92,315 | . | . | . | . | 48 | . |
| TN | WILLIAMSON | 81,021 | . | 0.9 | . | 0.106 | . | 0.005 |
| TN | WILSON | 67,675 | . | . | . | 0.115 | . | 0.009 |
| TX | BELL | 191,088 | . | . | . | . | 41 | . |
| TX | BEXAR | 1,185,394 | 5 | 0.02 | 0.009 | 0.126 | 38 | . |
| TX | BRAZORIA | 191,707 | . | . | . | 0.11 | . | . |
| TX | BREWSTER | 8,681 | . | . | . | 0.084 | . | . |
| TX | CAMERON | 260,120 | 2.2 | 0.02 | . | 0.077 | 40 | 0.004 |
| TX | COLLIN | 264,036 | . | 0.7 | . | 0.114 | 65 | . |
| TX | DALLAS | 1,852,810 | 5.5 | 0.17 | 0.019 | 0.135 | 87 | 0.008 |
| TX | DENTON | 273,525 | . | . | 0.01 | 0.131 | . | . |
| TX | ECTOR | 118,934 | . | . | . | . | 59 | . |
| TX | ELLIS | 85,167 | . | 0.27 | 0.007 | 0.108 | 102 | 0.046 |
| TX | EL PASO | 591,610 | 10.3 | 0.4 | 0.0351 | 0.123 | 158 | . |
| TX | GALVESTON | 217,399 | . | 0.02 | 0.0051 | 0.107 | 52 | 0.067 |
| TX | GREGG | 104,948 | . | . | . | 0.106 | . | . |
| TX | HARRIS | 2,818,199 | 7 | 0.02 | 0.0233 | 0.18 | 68 | 0.046 |
| TX | HIDALGO | 383,545 | . | . | . | 0.063 | 111 | . |
| TX | JEFFERSON | 239,397 | 2.1 | 0.02 | 0.0083 | 0.117 | 34 | 0.044 |
| TX | KAUFMAN | 52,220 | . | 0.03 | . | . | . | . |
| TX | LUBBOCK | 222,636 | . | . | . | . | 85 | . |
| TX | NUECES | 291,145 | . | . | . | 0.103 | 45 | 0.015 |
| TX | ORANGE | 80,509 | . | . | 0.0111 | 0.119 | . | . |
| TX | POTTER | 97,874 | . | . | . | . | 38 | . |
| TX | SMITH | 151,309 | . | . | . | 0.104 | 30 | . |
| TX | TARRANT | 1,170,103 | 3.2 | 0.02 | 0.021 | 0.131 | 56 | 0.011 |
| TX | TRAVIS | 576,407 | 3.2 | . | 0.0182 | 0.098 | 32 | . |
| TX | VICTORIA | 74,361 | . | . | . | 0.087 | . | . |
| TX | WEBB | 133,239 | 5.5 | . | . | 0.069 | 103 | . |
| TX | WICHITA | 122,378 | . | . | . | . | 50 | . |
| UT | CACHE | 70,183 | 5.7 | . | . | 0.083 | 109 | . |
| UT | DAVIS | 187,941 | 4 | . | 0.0204 | 0.114 | 109 | 0.013 |
| UT | GRAND | 6,620 | . | . | . | . | 52 | . |
| UT | IRON | 20,789 | . | . | . | . | 38 | . |
| UT | SALT LAKE | 725,956 | 6.9 | 0.03 | 0.0253 | 0.124 | 157 | . |
| UT | SAN JUAN | 12,621 | . | . | . | 0.077 | . | . |
| UT | TOOELE | 26,601 | . | . | . | . | 50 | 0.002 |
| UT | UTAH | 263,590 | 9.1 | . | 0.0242 | 0.105 | 141 | . |
| UT | WASHINGTON | 48,560 | 3.4 | . | . | 0.086 | 85 | . |
| UT | WEBER | 158,330 | 7 | . | 0.0263 | 0.103 | 98 | . |
| VT | BENNINGTON | 35,845 | . | . | . | 0.098 | 41 | . |
| VT | CHITTENDEN | 131,761 | 3.3 | . | 0.0165 | 0.075 | 37 | 0.014 |
| VT | RUTLAND | 62,142 | 3.6 | . | 0.0124 | . | 39 | 0.032 |
| VT | WASHINGTON | 54,928 | . | . | . | . | 38 | . |
| VT | WINDHAM | 41,588 | . | . | . | . | 41 | . |
| VA | ARLINGTON | 170,936 | 4 | . | 0.0243 | 0.112 | 38 | . |
| VA | CAROLINE | 19,217 | . | . | 0.0073 | 0.097 | . | . |
| VA | CARROLL | 26,594 | . | . | . | . | 46 | . |
| VA | CHARLES CITY | 6,282 | . | . | 0.0102 | 0.104 | . | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ 24-hr (ppm) |
|-------|-----------------|-----------------|---------------|---------------|--------------------------|------------------------------|--------------------------------|-----------------------------|
| VA | CHESTERFIELD | 209,274 | . | . | . | 0.106 | 69 | . |
| VA | CULPEPER | 27,791 | . | . | . | 37 | . | . |
| VA | FAIRFAX | 818,584 | 4.4 | 0.02 | 0.0218 | 0.116 | 50 | 0.04 |
| VA | FAUQUIER | 48,741 | . | . | . | 0.094 | . | . |
| VA | FREDERICK | 45,723 | . | . | . | 0.095 | . | . |
| VA | HANOVER | 63,306 | . | . | . | 0.099 | . | . |
| VA | HENRICO | 217,881 | . | . | . | 0.102 | 64 | . |
| VA | HENRY | 56,942 | . | . | . | 0.104 | . | . |
| VA | KING WILLIAM | 10,913 | . | . | . | . | 56 | . |
| VA | LOUDOUN | 86,129 | . | . | . | . | 56 | . |
| VA | MADISON | 11,949 | . | . | . | 0.093 | . | . |
| VA | NORTHUMBERLAND | 10,524 | . | . | . | . | 45 | . |
| VA | PRINCE WILLIAM | 215,686 | . | . | 0.0113 | 0.098 | 36 | . |
| VA | ROANOKE | 79,332 | . | . | 0.0128 | 0.084 | . | 0.014 |
| VA | SMYTH | 32,370 | . | . | . | . | 40 | . |
| VA | STAFFORD | 61,236 | . | . | . | 0.1 | . | . |
| VA | TAZEWELL | 45,960 | . | . | . | . | 61 | . |
| VA | WARREN | 26,142 | . | . | . | . | 37 | . |
| VA | WISE | 39,573 | . | . | . | . | 61 | . |
| VA | WYTHE | 25,466 | . | . | . | 0.084 | . | . |
| VA | ALEXANDRIA | 111,183 | 3.7 | . | 0.0263 | 0.093 | 57 | 0.048 |
| VA | BRISTOL | 18,426 | . | . | . | . | 39 | . |
| VA | CHARLOTTESVILLE | 40,341 | . | . | . | . | 39 | . |
| VA | CHESAPEAKE | 151,976 | . | 0.03 | . | . | 38 | . |
| VA | COVINGTON | 6,991 | . | . | . | . | 47 | . |
| VA | FREDERICKSBURG | 19,027 | . | . | . | . | 38 | . |
| VA | HAMPTON | 133,793 | . | . | . | 0.097 | 50 | 0.019 |
| VA | LYNCHBURG | 66,049 | . | . | . | . | 41 | . |
| VA | MARTINSVILLE | 16,162 | . | . | . | . | 49 | . |
| VA | NEWPORT NEWS | 170,045 | 2.8 | . | . | . | . | . |
| VA | NORFOLK | 261,229 | 5.9 | . | 0.0179 | . | 36 | 0.025 |
| VA | RICHMOND | 203,056 | 3.2 | 0.01 | 0.0222 | . | 56 | 0.027 |
| VA | ROANOKE | 96,397 | 5.9 | . | . | . | 78 | . |
| VA | SUFFOLK | 52,141 | . | . | . | 0.093 | 46 | . |
| VA | WINCHESTER | 21,947 | . | . | . | . | 45 | . |
| WA | ASOTIN | 17,605 | . | . | . | . | 75 | . |
| WA | BENTON | 112,560 | . | . | . | . | 82 | . |
| WA | CHELAN | 52,250 | . | . | . | . | 37 | . |
| WA | CLALLAM | 56,464 | . | . | . | 0.058 | 43 | 0.085 |
| WA | CLARK | 238,053 | 6.4 | . | . | 0.108 | 44 | . |
| WA | COWLITZ | 82,119 | . | . | . | . | 55 | . |
| WA | KING | 1,507,319 | 6.8 | 0.66 | 0.0201 | 0.118 | 93 | 0.019 |
| WA | KITSAP | 189,731 | 3.5 | . | . | . | 41 | . |
| WA | PIERCE | 586,203 | 6.3 | . | . | 0.097 | 74 | 0.028 |
| WA | SKAGIT | 79,555 | . | . | . | 0.064 | . | 0.031 |
| WA | SNOHOMISH | 465,642 | 4.9 | . | . | 0.076 | 80 | 0.014 |
| WA | SPOKANE | 361,364 | 9 | . | . | 0.079 | 110 | . |
| WA | THURSTON | 161,238 | 4 | . | . | . | 53 | . |
| WA | WALLA WALLA | 48,439 | . | . | . | . | 122 | . |
| WA | WHATCOM | 127,780 | . | . | . | 0.078 | 37 | 0.013 |
| WA | YAKIMA | 188,823 | 7.4 | . | . | . | 112 | . |
| WV | BERKELEY | 59,253 | . | 0.01 | . | . | . | . |
| WV | BROOKE | 26,992 | . | . | . | . | 87 | 0.04 |
| WV | CABELL | 96,827 | . | 0.05 | . | 0.113 | . | 0.023 |
| WV | FAYETTE | 47,952 | . | . | . | . | 46 | . |
| WV | GREENBRIER | 34,693 | . | . | 0.0047 | 0.09 | . | 0.019 |
| WV | HANCOCK | 35,233 | 6.2 | 0.04 | 0.0158 | 0.099 | 170 | 0.066 |
| WV | HARRISON | 69,371 | . | 0.01 | . | . | . | . |
| WV | KANAWHA | 207,619 | 2.3 | 0.02 | 0.0197 | 0.104 | 50 | 0.039 |
| WV | MARION | 57,249 | . | 0.03 | . | . | 49 | 0.072 |
| WV | MARSHALL | 37,356 | . | . | . | . | 57 | 0.042 |
| WV | MONONGALIA | 75,509 | . | 0.01 | . | . | 48 | 0.045 |
| WV | OHIO | 50,871 | 3.5 | . | . | 0.105 | 48 | . |
| WV | PUTNAM | 42,835 | . | . | . | . | 51 | . |
| WV | TUCKER | 7,728 | . | . | . | 0.096 | . | . |
| WV | WAYNE | 41,636 | . | . | . | . | 50 | 0.035 |
| WV | WOOD | 86,915 | . | 0.02 | . | 0.108 | 50 | 0.046 |
| WI | BROWN | 194,594 | . | . | . | 0.105 | . | 0.011 |
| WI | COLUMBIA | 45,088 | . | . | . | 0.093 | . | . |
| WI | DANE | 367,085 | 4.1 | . | . | 0.094 | 44 | 0.01 |
| WI | DODGE | 76,559 | . | . | . | 0.092 | . | . |
| WI | DOOR | 25,690 | . | . | . | 0.107 | . | . |

Table A-11. Maximum Air Quality Concentrations by County, 1996 (continued)

| State | County | 1990 Population | CO 8-hr (ppm) | Pb QMAX (μgm) | NO_2 AM (ppm) | O_3 2nd MAX (ppm) | PM_{10} 2nd MAX (μgm) | SO_2 24-hr (ppm) |
|-------|-------------|-----------------|---------------|----------------------------|------------------------|----------------------------|---|---------------------------|
| WI | DOUGLAS | 41,758 | . | . | . | . | 44 | . |
| WI | FLORENCE | 4,590 | . | . | . | 0.081 | . | . |
| WI | FOND DU LAC | 90,083 | . | . | . | 0.096 | . | . |
| WI | JEFFERSON | 67,783 | . | . | . | 0.091 | . | . |
| WI | KENOSHA | 128,181 | . | . | . | 0.141 | . | . |
| WI | KEWAUNEE | 18,878 | . | . | . | 0.097 | . | . |
| WI | MANITOWOC | 80,421 | . | . | 0.0034 | 0.126 | . | . |
| WI | MARATHON | 115,400 | . | . | . | 0.079 | 50 | 0.015 |
| WI | MILWAUKEE | 959,275 | 2.7 | 0.03 | 0.021 | 0.119 | 52 | 0.028 |
| WI | ONEIDA | 31,679 | . | . | . | 0.078 | . | 0.067 |
| WI | OUTAGAMIE | 140,510 | . | . | . | 0.094 | . | . |
| WI | OZAUKEE | 72,831 | . | . | 0.0065 | 0.11 | . | . |
| WI | POLK | 34,773 | 0.9 | . | . | 0.08 | . | . |
| WI | RACINE | 175,034 | 3 | . | . | 0.129 | . | . |
| WI | ROCK | 139,510 | . | . | . | 0.103 | . | . |
| WI | ST CROIX | 50,251 | . | . | . | 0.083 | . | . |
| WI | SAUK | 46,975 | . | . | 0.0046 | 0.082 | . | . |
| WI | SHEBOYGAN | 103,877 | . | . | . | 0.105 | . | . |
| WI | TAYLOR | 18,901 | . | . | . | 0.073 | . | . |
| WI | VERNON | 25,617 | . | . | . | 0.077 | 30 | . |
| WI | VILAS | 17,707 | . | . | . | . | 30 | . |
| WI | WALWORTH | 75,000 | . | . | . | 0.1 | . | . |
| WI | WASHINGTON | 95,328 | . | . | . | 0.095 | . | . |
| WI | WAUKESHA | 304,715 | 1.5 | . | . | 0.093 | 69 | . |
| WI | WINNEBAGO | 140,320 | . | . | . | 0.094 | . | . |
| WY | ALBANY | 30,797 | . | . | . | 0.08 | 55 | . |
| WY | CAMPBELL | 29,370 | . | . | . | . | 101 | . |
| WY | FREMONT | 33,662 | . | . | . | . | 78 | . |
| WY | LARAMIE | 73,142 | . | . | . | . | 31 | . |
| WY | NATRONA | 61,226 | . | . | . | . | 36 | . |
| WY | PARK | 23,178 | . | . | . | . | 23 | . |
| WY | SHERIDAN | 23,562 | . | . | . | . | 80 | . |
| WY | SWEETWATER | 38,823 | . | . | . | . | 69 | . |
| WY | TETON | 11,172 | . | . | . | 0.072 | 93 | . |

CO = Highest second maximum non-overlapping 8-hour concentration (Applicable NAAQS is 9 ppm)

Pb = Highest quarterly maximum concentration (Applicable NAAQS is 1.5 $\mu\text{g}/\text{m}^3$)

NO_2 = Highest arithmetic mean concentration (Applicable NAAQS is 0.053 ppm)

O_3 = Highest second daily maximum 1-hour concentration (Applicable NAAQS is 0.12 ppm)

PM-10 = Highest second maximum 24-hour concentration (Applicable NAAQS is 150 $\mu\text{g}/\text{m}^3$)
Data from exceptional events not included.

SO_2 = Highest second maximum 24-hour concentration (Applicable NAAQS is 0.14 ppm)

WTD = Weighted

AM = Annual mean

UGM = Units are micrograms per cubic meter

PPM = Units are parts per million

Note: The reader is cautioned that this summary is not adequate in itself to numerically rank counties according to their air quality. The monitoring data represent the quality of air in the vicinity of the monitoring site but may not necessarily represent urban-wide air quality.

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995**TOTAL LIGHT EXTINCTION (Mm⁻¹)**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | | | | | | |
|----------------------|------------|---------|-------|-----------------------|------|------|------|-------|-------|------|------|
| | | | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| Acadia NP | 10TH | -.0377* | .0156 | 36.5 | 40.9 | 41.4 | 38.3 | 32.1 | 35.4 | 30.9 | 30.8 |
| Badlands (W) | 10TH | -.0222 | .0543 | 28.0 | 25.8 | 26.4 | 26.5 | 27.2 | 25.8 | 24.3 | 21.9 |
| Bandelier (W) | 10TH | -.0323 | .0894 | 22.6 | 26.5 | 28.2 | 25.4 | 23.5 | 24.2 | 22.9 | 18.3 |
| Big Bend NP | 10TH | -.0222 | .0894 | 27.4 | 27.9 | 29.1 | 25.9 | 22.8 | 26.2 | 23.5 | 24.9 |
| Bryce Canyon NP | 10TH | -.0311 | .0894 | 19.4 | 17.9 | 19.7 | 20.5 | 19.6 | 18.6 | 16.9 | 15.2 |
| Bridger (W) | 10TH | -.0253 | .0543 | 16.5 | 17.2 | 19.3 | 16.5 | 17.0 | 15.4 | 16.2 | 13.7 |
| Canyonlands NP | 10TH | -.0386 | .0543 | 20.3 | 22.0 | 24.6 | 23.0 | 20.0 | 21.0 | 19.4 | 16.4 |
| Chiricahua (W) | 10TH | -.0167* | .0305 | 22.7 | 22.1 | 23.0 | 22.3 | 20.5 | 21.7 | 20.4 | 20.8 |
| Crater Lake NP | 10TH | -.0242 | .0543 | 17.9 | 19.2 | 19.3 | 19.2 | 18.8 | 16.6 | 17.3 | 14.6 |
| Denali NP | 10TH | -.0246* | .0071 | 17.2 | 16.4 | 21.5 | 17.0 | 15.7 | 15.2 | 15.2 | 14.5 |
| Glacier NP | 10TH | -.0169 | .2742 | 29.7 | 31.3 | 33.9 | 35.7 | 35.1 | 32.3 | 27.9 | 26.4 |
| Grand Canyon NP | 10TH | -.0116 | .2742 | 17.9 | 18.4 | 22.4 | 20.6 | 20.3 | 18.1 | 17.0 | 18.3 |
| Great Sand Dunes (W) | 10TH | -.0629* | .0071 | 23.6 | 22.2 | 26.4 | 24.8 | 21.2 | 19.9 | 18.5 | 15.8 |
| Great Smoky Mtns NP | 10TH | -.0190* | .0305 | 48.9 | 51.4 | 50.2 | 50.7 | 46.8 | 47.6 | 44.9 | 45.7 |
| Guadalupe Mtns NP | 10TH | -.0171 | .1375 | 27.1 | 30.2 | 28.1 | 23.1 | 25.3 | 26.9 | 23.7 | 26.0 |
| Lassen Volcanic NP | 10TH | -.0311 | .0543 | 17.5 | 18.8 | 20.4 | 16.0 | 18.5 | 16.2 | 16.0 | 14.9 |
| Mesa Verde NP | 10TH | -.0415 | .0894 | 21.6 | 19.6 | 25.2 | 22.6 | 20.2 | 19.1 | 20.2 | 15.7 |
| Mt. Rainier NP | 10TH | -.0305 | .2742 | 24.7 | 23.4 | 27.4 | 27.9 | 32.7 | 25.4 | 21.1 | 19.0 |
| Petrified Forest NP | 10TH | -.0547* | .0305 | 23.3 | 28.0 | 28.4 | 27.7 | 24.0 | 22.2 | 22.4 | 19.5 |
| Pinnacles (W) | 10TH | -.0389* | .0156 | 31.9 | 32.8 | 41.1 | 29.5 | 27.7 | 31.6 | 25.7 | 25.1 |
| Pt. Reyes NS | 10TH | -.0257 | .1375 | 32.0 | 33.7 | 42.8 | 35.5 | 33.0 | 35.2 | 31.0 | 27.8 |
| Redwood NP | 10TH | -.0316* | .0071 | 28.7 | 26.2 | 31.1 | 26.1 | 27.5 | 23.7 | 23.3 | 23.0 |
| Rocky Mtns NP | 10TH | -.0168 | .1375 | 19.8 | 17.9 | 19.4 | 18.1 | 18.6 | 18.1 | 18.4 | 14.9 |
| San Gorgonio (W) | 10TH | -.0265 | .1994 | 23.1 | 22.0 | 30.8 | 21.9 | 19.8 | 22.1 | 18.2 | 22.5 |
| Shenandoah NP | 10TH | -.0150 | .1375 | 63.2 | 54.5 | 58.3 | 60.8 | 48.7 | 59.8 | 48.6 | 56.1 |
| Tonto NM | 10TH | -.0289* | .0156 | 27.8 | 27.1 | 29.8 | 25.3 | 25.9 | 24.1 | 22.5 | 24.4 |
| Washington, DC | 10TH | -.0021 | .4524 | 88.0 | 93.3 | 95.6 | 92.2 | 93.4 | 107.5 | 91.9 | 68.9 |
| Weminuche (W) | 10TH | 0.0016 | .5476 | 17.6 | 18.4 | 19.7 | 20.9 | 20.6 | 18.1 | 20.5 | 15.4 |
| Yellowstone NP | 10TH | -.0550* | .0071 | 22.8 | 21.6 | 24.4 | 22.2 | 19.4 | 16.8 | 17.1 | 16.4 |
| Yosemite NP | 10TH | -.0060 | .1994 | 18.1 | 17.1 | 24.2 | 17.9 | 18.8 | 18.0 | 16.4 | 17.7 |
| Acadia NP | 50TH | -.0314 | .1375 | 61.0 | 75.9 | 65.0 | 66.4 | 59.5 | 61.0 | 61.5 | 53.2 |
| Badlands (W) | 50TH | -.0170 | .0543 | 43.9 | 46.1 | 43.5 | 45.1 | 44.4 | 38.2 | 40.2 | 39.7 |
| Bandelier (W) | 50TH | -.0466* | .0071 | 32.9 | 34.6 | 35.6 | 33.7 | 32.0 | 30.8 | 28.9 | 24.8 |
| Big Bend NP | 50TH | -.0069 | .1375 | 42.2 | 44.9 | 42.2 | 41.0 | 40.9 | 41.3 | 42.6 | 40.3 |
| Bryce Canyon NP | 50TH | -.0198 | .1375 | 31.4 | 31.5 | 28.8 | 31.6 | 28.7 | 28.8 | 30.4 | 24.1 |
| Bridger (W) | 50TH | -.0242 | .1375 | 24.5 | 24.9 | 27.6 | 26.1 | 27.0 | 22.4 | 23.6 | 21.0 |
| Canyonlands NP | 50TH | -.0264 | .0894 | 29.7 | 29.2 | 34.7 | 33.2 | 29.5 | 29.2 | 29.3 | 23.1 |
| Chiricahua (W) | 50TH | -.0218* | .0305 | 34.4 | 32.8 | 34.5 | 32.0 | 30.1 | 32.8 | 31.1 | 29.1 |
| Crater Lake NP | 50TH | 0.0065 | .4524 | 24.0 | 28.1 | 30.2 | 32.2 | 30.4 | 25.2 | 31.4 | 22.4 |
| Denali NP | 50TH | -.0366* | .0156 | 22.5 | 24.3 | 27.5 | 21.1 | 19.5 | 19.4 | 21.0 | 18.0 |
| Glacier NP | 50TH | -.0152 | .1994 | 52.7 | 51.0 | 54.0 | 55.0 | 54.5 | 48.6 | 51.0 | 44.1 |
| Grand Canyon NP | 50TH | -.0287 | .0543 | 27.7 | 29.5 | 32.7 | 30.7 | 29.2 | 27.4 | 27.4 | 25.3 |
| Great Sand Dunes (W) | 50TH | -.0401* | .0156 | 30.5 | 33.4 | 33.1 | 31.9 | 30.7 | 26.4 | 27.1 | 23.9 |
| Great Smoky Mtns NP | 50TH | 0.0105 | .4524 | 86.3 | 93.1 | 94.5 | 85.8 | 100.2 | 104.8 | 76.3 | 90.7 |
| Guadalupe Mtns NP | 50TH | -.0093 | .2742 | 39.7 | 42.1 | 45.6 | 37.6 | 34.2 | 37.4 | 41.0 | 37.9 |
| Lassen Volcanic NP | 50TH | -.0210* | .0305 | 29.7 | 29.0 | 29.3 | 25.7 | 27.5 | 26.7 | 27.6 | 24.5 |
| Mesa Verde NP | 50TH | -.0176 | .1994 | 29.5 | 27.2 | 28.2 | 30.7 | 26.7 | 27.2 | 29.0 | 23.6 |
| Mt. Rainier NP | 50TH | 0.0037 | .5476 | 58.0 | 54.3 | 55.0 | 65.7 | 69.7 | 67.8 | 57.2 | 48.5 |

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995 (continued)**TOTAL LIGHT EXTINCTION (Mm⁻¹)**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | | | | | | |
|----------------------|------------|---------|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|
| | | | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| Petrified Forest NP | 50TH | -.0416* | .0305 | 36.1 | 37.2 | 40.4 | 39.2 | 35.2 | 31.1 | 32.6 | 27.6 |
| Pinnacles (W) | 50TH | -.0323 | .0894 | 55.1 | 58.1 | 63.5 | 55.1 | 52.3 | 55.5 | 46.2 | 47.6 |
| Pt. Reyes NS | 50TH | -.0375 | .0543 | 56.8 | 62.6 | 68.7 | 59.6 | 51.5 | 53.3 | 55.2 | 44.5 |
| Redwood NP | 50TH | -.0191 | .0894 | 48.7 | 52.3 | 58.5 | 51.6 | 50.5 | 43.5 | 48.7 | 46.7 |
| Rocky Mtns NP | 50TH | -.0186 | .0894 | 30.5 | 31.3 | 31.8 | 30.2 | 31.9 | 27.7 | 30.1 | 23.7 |
| San Gorgonio (W) | 50TH | -.0178 | .1994 | 65.0 | 71.3 | 70.3 | 73.8 | 57.5 | 72.7 | 62.2 | 55.9 |
| Shenandoah NP | 50TH | -.0126 | .1375 | 125.7 | 105.6 | 117.8 | 124.0 | 125.6 | 122.5 | 109.1 | 103.8 |
| Tonto NM | 50TH | -.0252* | .0305 | 38.1 | 42.1 | 39.3 | 38.5 | 39.0 | 37.4 | 34.7 | 34.7 |
| Washington, DC | 50TH | 0.0059 | .2742 | 121.0 | 154.8 | 152.6 | 175.8 | 171.9 | 176.6 | 155.7 | 126.8 |
| Weminuche (W) | 50TH | -.0168* | .0305 | 29.0 | 30.7 | 29.3 | 29.8 | 29.0 | 27.7 | 28.6 | 23.0 |
| Yellowstone NP | 50TH | -.0364 | .0543 | 27.8 | 29.5 | 31.5 | 31.7 | 28.2 | 26.7 | 26.1 | 21.9 |
| Yosemite NP | 50TH | -.0003 | .5476 | 35.9 | 36.4 | 40.2 | 40.6 | 42.1 | 36.6 | 33.0 | 36.1 |
| Acadia NP | 90TH | 0.0053 | .5476 | 145.7 | 156.1 | 131.9 | 133.7 | 152.2 | 153.9 | 155.8 | 122.9 |
| Badlands (W) | 90TH | 0.0081 | .4524 | 68.0 | 65.3 | 65.3 | 67.6 | 86.8 | 69.3 | 74.6 | 64.8 |
| Bandelier (W) | 90TH | -.0119 | .4524 | 41.9 | 52.2 | 36.2 | 40.6 | 44.9 | 42.4 | 43.2 | 38.2 |
| Big Bend NP | 90TH | -.0015 | .3598 | 67.3 | 70.1 | 63.5 | 67.0 | 61.3 | 63.9 | 69.0 | 66.6 |
| Bryce Canyon NP | 90TH | -.0091 | .1375 | 41.1 | 44.8 | 38.7 | 40.1 | 40.2 | 41.3 | 40.0 | 36.8 |
| Brider (W) | 90TH | -.0170 | .0543 | 37.8 | 37.5 | 38.0 | 36.4 | 40.3 | 31.6 | 35.2 | 30.7 |
| Canyonlands NP | 90TH | -.0394* | .0071 | 43.1 | 45.4 | 45.3 | 42.9 | 37.1 | 39.0 | 38.3 | 32.4 |
| Chiricahua (W) | 90TH | -.0050 | .1994 | 51.0 | 45.7 | 45.9 | 45.5 | 45.1 | 48.0 | 48.7 | 44.5 |
| Crater Lake NP | 90TH | 0.0006 | .5476 | 47.4 | 52.7 | 51.0 | 49.2 | 48.0 | 53.6 | 53.5 | 41.6 |
| Denali NP | 90TH | -.0254 | .1994 | 35.0 | 34.6 | 44.1 | 39.4 | 30.3 | 34.8 | 36.4 | 29.5 |
| Glacier NP | 90TH | -.0089 | .3598 | 73.1 | 89.6 | 88.1 | 90.0 | 92.9 | 86.2 | 85.3 | 80.6 |
| Grand Canyon NP | 90TH | -.0142 | .1375 | 40.0 | 44.2 | 44.9 | 38.3 | 38.8 | 39.6 | 39.6 | 36.3 |
| Great Sand Dunes (W) | 90TH | -.0353 | .0894 | 43.2 | 48.1 | 42.7 | 42.2 | 36.0 | 37.4 | 52.7 | 34.6 |
| Great Smoky Mtns NP | 90TH | 0.0113 | .3598 | 154.0 | 175.9 | 219.0 | 194.6 | 188.5 | 172.9 | 185.8 | 188.6 |
| Guadalupe Mtns NP | 90TH | -.0209 | .0894 | 62.8 | 69.1 | 58.7 | 55.2 | 53.7 | 55.6 | 61.9 | 54.7 |
| Lassen Volcanic NP | 90TH | -.0116 | .3598 | 48.5 | 54.3 | 43.6 | 37.2 | 45.7 | 46.5 | 49.1 | 41.9 |
| Mesa Verde NP | 90TH | -.0078 | .2742 | 37.5 | 41.3 | 43.7 | 36.2 | 34.4 | 42.9 | 39.4 | 36.0 |
| Mt. Rainier NP | 90TH | -.0310 | .2742 | 107.1 | 130.6 | 165.1 | 131.0 | 132.4 | 113.4 | 120.9 | 100.7 |
| Petrified Forest NP | 90TH | -.0323* | .0156 | 48.8 | 51.4 | 54.0 | 47.7 | 46.3 | 43.4 | 41.0 | 44.2 |
| Pinnacles (W) | 90TH | -.0393* | .0305 | 78.7 | 97.5 | 96.5 | 86.0 | 87.9 | 77.3 | 74.8 | 74.9 |
| Pt. Reyes NS | 90TH | -.0319 | .2742 | 94.8 | 167.2 | 126.7 | 108.1 | 120.0 | 159.8 | 109.4 | 90.3 |
| Redwood NP | 90TH | -.0235 | .0894 | 92.4 | 98.7 | 99.6 | 95.6 | 98.0 | 82.4 | 76.3 | 86.8 |
| Rocky Mtns NP | 90TH | -.0175 | .0543 | 43.7 | 50.1 | 46.9 | 44.0 | 43.0 | 44.6 | 43.6 | 42.4 |
| San Gorgonio (W) | 90TH | -.0334 | .0543 | 128.7 | 136.0 | 144.0 | 129.7 | 141.8 | 119.9 | 116.7 | 98.5 |
| Shenandoah NP | 90TH | 0.0091 | .3598 | 227.2 | 232.3 | 249.8 | 263.7 | 255.2 | 219.7 | 240.7 | 244.7 |
| Tonto NM | 90TH | -.0113 | .1994 | 52.8 | 62.1 | 48.8 | 51.6 | 51.7 | 54.7 | 43.9 | 49.7 |
| Washington, DC | 90TH | 0.0005 | .5476 | 246.2 | 235.6 | 229.1 | 296.0 | 307.4 | 298.6 | 263.2 | 225.2 |
| Weminuche (W) | 90TH | -.0257* | .0156 | 39.8 | 46.2 | 40.4 | 40.5 | 37.4 | 38.4 | 36.7 | 35.7 |
| Yellowstone NP | 90TH | -.0358* | .0305 | 50.7 | 49.3 | 47.5 | 42.7 | 46.8 | 38.7 | 50.1 | 37.2 |
| Yosemite NP | 90TH | -.0088 | .3598 | 73.1 | 66.0 | 73.4 | 63.0 | 73.4 | 60.1 | 65.8 | 69.6 |

* Denotes that the slope is significant at the .05 significance level.

NP = National Park

W = Wilderness

NS = National Seashore

NM = National Monument

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995**LIGHT EXTINCTION DUE TO SULFATE (Mm⁻¹)**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | | | | | | |
|----------------------|------------|---------|-------|-----------------------|------|------|------|------|------|------|------|
| | | | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| Acadia NP | 10TH | -.0353 | .1375 | 12.5 | 16.1 | 17.0 | 14.7 | 12.0 | 13.8 | 11.0 | 12.9 |
| Badlands (W) | 10TH | 0.0187 | .3598 | 4.9 | 5.5 | 6.0 | 6.0 | 7.8 | 6.5 | 5.8 | 5.2 |
| Bandelier (W) | 10TH | -.0200 | .3598 | 2.8 | 3.7 | 4.7 | 4.3 | 4.7 | 4.1 | 3.5 | 2.5 |
| Big Bend NP | 10TH | -.0130 | .4524 | 5.7 | 6.4 | 7.0 | 5.2 | 5.0 | 6.5 | 5.2 | 6.0 |
| Bryce Canyon NP | 10TH | -.0362 | .4524 | 3.0 | 1.9 | 2.7 | 3.2 | 3.9 | 3.0 | 2.3 | 2.1 |
| Bridger (W) | 10TH | 0.0000 | .5476 | 1.7 | 1.8 | 2.7 | 2.0 | 2.9 | 2.0 | 2.0 | 1.6 |
| Canyonlands NP | 10TH | -.0629 | .3598 | 3.0 | 3.1 | 5.1 | 3.8 | 3.9 | 3.5 | 3.1 | 2.0 |
| Chiricahua (W) | 10TH | 0.0000 | .5476 | 3.4 | 3.6 | 4.5 | 4.2 | 4.0 | 4.2 | 3.4 | 3.7 |
| Crater Lake NP | 10TH | -.0138 | .4524 | 1.7 | 2.1 | 2.5 | 2.0 | 3.5 | 2.3 | 2.0 | 1.5 |
| Denali NP | 10TH | 0.0123 | .4524 | 1.6 | 1.6 | 2.7 | 2.1 | 2.2 | 1.9 | 2.1 | 1.9 |
| Glacier NP | 10TH | -.0105 | .5476 | 5.7 | 8.5 | 9.6 | 9.4 | 11.5 | 9.0 | 7.0 | 7.0 |
| Grand Canyon NP | 10TH | 0.0000 | .5476 | 2.0 | 1.9 | 2.8 | 2.8 | 3.6 | 2.6 | 1.9 | 2.3 |
| Great Sand Dunes (W) | 10TH | -.0489 | .2742 | 2.9 | 2.4 | 4.1 | 3.5 | 4.1 | 3.2 | 2.8 | 2.0 |
| Great Smoky Mtns NP | 10TH | -.0129 | .1994 | 17.2 | 21.0 | 20.7 | 20.3 | 18.2 | 19.2 | 16.9 | 19.6 |
| Guadalupe Mtns NP | 10TH | 0.0060 | .5476 | 5.3 | 7.1 | 6.5 | 4.5 | 5.7 | 6.0 | 5.3 | 6.9 |
| Lassen Volcanic NP | 10TH | 0.0000 | .4524 | 1.3 | 1.6 | 1.3 | 0.9 | 2.5 | 1.6 | 1.3 | 1.4 |
| Mesa Verde NP | 10TH | -.0281 | .3598 | 2.6 | 2.7 | 5.2 | 3.5 | 4.0 | 3.3 | 3.1 | 2.3 |
| Mt. Rainier NP | 10TH | -.0353 | .2742 | 5.7 | 6.3 | 7.8 | 7.5 | 11.7 | 7.1 | 4.8 | 4.0 |
| Petrified Forest NP | 10TH | -.0573 | .2742 | 2.7 | 3.9 | 4.9 | 5.1 | 4.3 | 3.7 | 3.2 | 2.9 |
| Pinnacles (W) | 10TH | -.0542 | .0543 | 5.9 | 5.6 | 7.3 | 5.1 | 4.7 | 5.9 | 4.2 | 4.6 |
| Pt. Reyes NS | 10TH | 0.0264 | .4524 | 7.1 | 8.7 | 15.7 | 12.8 | 10.1 | 12.0 | 10.9 | 9.5 |
| Redwood NP | 10TH | -.0164 | .3598 | 7.5 | 5.8 | 8.5 | 7.0 | 9.0 | 6.3 | 5.6 | 7.0 |
| Rocky Mtns NP | 10TH | -.0458 | .1375 | 2.1 | 2.4 | 2.4 | 2.2 | 2.8 | 2.2 | 1.8 | 1.5 |
| San Gorgonio (W) | 10TH | 0.0205 | .3598 | 1.9 | 2.0 | 2.8 | 2.0 | 2.3 | 2.2 | 1.6 | 2.4 |
| Shenandoah NP | 10TH | -.0058 | .3598 | 26.1 | 24.7 | 25.4 | 26.3 | 22.6 | 26.1 | 19.9 | 25.5 |
| Tonto NM | 10TH | -.0164 | .2742 | 3.3 | 3.8 | 5.2 | 3.6 | 4.6 | 3.7 | 3.2 | 3.4 |
| Washington, DC | 10TH | -.0133 | .3598 | 35.5 | 34.1 | 32.9 | 36.0 | 39.8 | 45.7 | 32.3 | 29.9 |
| Weminuche (W) | 10TH | 0.0746 | .1994 | 1.3 | 1.9 | 2.4 | 2.4 | 3.4 | 2.4 | 3.1 | 1.7 |
| Yellowstone NP | 10TH | -.0592* | .0305 | 3.1 | 2.5 | 3.0 | 2.8 | 3.0 | 2.0 | 2.3 | 2.0 |
| Yosemite NP | 10TH | 0.0000 | .4524 | 1.4 | 1.5 | 2.7 | 1.5 | 2.9 | 1.8 | 1.4 | 1.5 |
| Acadia NP | 50TH | -.0491* | .0305 | 29.5 | 39.6 | 35.3 | 33.3 | 29.3 | 30.3 | 29.4 | 25.6 |
| Badlands (W) | 50TH | 0.0092 | .2742 | 11.8 | 14.1 | 14.3 | 14.0 | 14.7 | 12.6 | 14.0 | 14.3 |
| Bandelier (W) | 50TH | 0.0000 | .5476 | 6.7 | 6.6 | 6.3 | 6.6 | 7.3 | 7.3 | 6.7 | 5.0 |
| Big Bend NP | 50TH | 0.0069 | .2742 | 13.0 | 12.9 | 12.9 | 10.6 | 12.2 | 12.9 | 13.5 | 13.6 |
| Bryce Canyon NP | 50TH | -.0095 | .4524 | 7.8 | 7.4 | 6.7 | 7.6 | 8.4 | 7.1 | 8.8 | 6.0 |
| Bridger (W) | 50TH | 0.0000 | .5476 | 3.8 | 5.0 | 5.0 | 4.8 | 6.0 | 4.6 | 5.0 | 4.6 |
| Canyonlands NP | 50TH | -.0432 | .1994 | 6.5 | 5.7 | 8.0 | 7.8 | 7.0 | 6.2 | 6.5 | 4.6 |
| Chiricahua (W) | 50TH | 0.0099 | .3598 | 8.5 | 8.0 | 8.7 | 7.2 | 8.0 | 10.0 | 9.5 | 8.2 |
| Crater Lake NP | 50TH | 0.0684 | .1375 | 3.7 | 4.2 | 4.9 | 7.0 | 7.5 | 5.7 | 6.1 | 4.7 |
| Denali NP | 50TH | 0.0366 | .3598 | 3.2 | 5.6 | 7.7 | 3.8 | 4.2 | 4.5 | 4.7 | 4.3 |
| Glacier NP | 50TH | 0.0169 | .0543 | 13.1 | 14.2 | 16.0 | 14.9 | 18.1 | 15.1 | 15.5 | 15.6 |
| Grand Canyon NP | 50TH | -.0021 | .5476 | 5.4 | 6.1 | 7.1 | 6.7 | 7.1 | 6.0 | 6.6 | 5.7 |
| Great Sand Dunes (W) | 50TH | -.0052 | .4524 | 5.9 | 6.9 | 6.1 | 5.9 | 7.0 | 6.0 | 6.7 | 5.7 |
| Great Smoky Mtns NP | 50TH | 0.0222 | .3598 | 40.8 | 50.0 | 49.7 | 45.7 | 57.0 | 60.5 | 41.4 | 49.1 |
| Guadalupe Mtns NP | 50TH | 0.0107 | .3598 | 10.7 | 10.6 | 12.0 | 10.6 | 10.8 | 10.2 | 13.5 | 11.9 |
| Lassen Volcanic NP | 50TH | 0.0217 | .1994 | 4.2 | 3.8 | 3.4 | 2.8 | 4.6 | 5.0 | 4.7 | 4.3 |
| Mesa Verde NP | 50TH | 0.0146 | .3598 | 6.1 | 5.7 | 6.5 | 7.4 | 6.6 | 6.4 | 8.4 | 5.6 |
| Mt. Rainier NP | 50TH | 0.0183 | .3598 | 24.1 | 21.1 | 19.6 | 32.0 | 34.0 | 33.6 | 25.5 | 22.7 |

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995 (continued)**LIGHT EXTINCTION DUE TO SULFATE (Mm^{-1})**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|----------------------|------------|--------|-------|--------------------------|-------|-------|-------|-------|-------|-------|-------|------|------|
| | | | | | | | | | | | | | |
| Petrified Forest NP | 50TH | -.0258 | .2742 | 6.9 | 7.7 | 9.4 | 9.2 | 8.5 | 6.9 | 8.1 | 6.0 | | |
| Pinnacles (W) | 50TH | -.0050 | .5476 | 8.3 | 12.5 | 14.3 | 12.5 | 11.7 | 11.4 | 9.1 | 9.1 | 13.6 | |
| Pt. Reyes NS | 50TH | -.0101 | .2742 | 18.9 | 23.3 | 21.9 | 22.9 | 19.6 | 18.8 | 22.0 | 19.1 | | |
| Redwood NP | 50TH | 0.0099 | .4524 | 18.2 | 22.1 | 24.1 | 20.8 | 20.8 | 15.5 | 21.4 | 23.5 | | |
| Rocky Mtns NP | 50TH | -.0100 | .3598 | 6.0 | 5.9 | 7.1 | 6.1 | 7.1 | 5.9 | 6.5 | 4.8 | | |
| San Gorgonio (W) | 50TH | 0.0164 | .3598 | 8.5 | 7.2 | 7.2 | 11.8 | 9.4 | 11.5 | 8.9 | 8.8 | | |
| Shenandoah NP | 50TH | -.0062 | .2742 | 71.0 | 58.6 | 63.1 | 70.0 | 73.2 | 72.7 | 57.4 | 56.7 | | |
| Tonto NM | 50TH | 0.0021 | .5476 | 6.7 | 8.2 | 6.7 | 8.7 | 7.8 | 7.5 | 8.0 | 6.9 | | |
| Washington, DC | 50TH | 0.0231 | .2742 | 51.3 | 61.3 | 54.9 | 83.0 | 75.8 | 79.7 | 64.7 | 55.9 | | |
| Weminuche (W) | 50TH | -.0039 | .5476 | 5.9 | 7.2 | 6.9 | 6.2 | 7.6 | 6.6 | 7.4 | 5.1 | | |
| Yellowstone NP | 50TH | -.0022 | .4524 | 4.4 | 4.5 | 4.6 | 4.9 | 5.2 | 4.6 | 4.4 | 3.9 | | |
| Yosemite NP | 50TH | 0.0390 | .0894 | 5.3 | 6.1 | 7.1 | 7.7 | 8.5 | 7.2 | 6.4 | 7.6 | | |
| Acadia NP | 90TH | -.0097 | .3598 | 88.6 | 101.5 | 79.8 | 78.2 | 102.1 | 97.5 | 100.2 | 73.3 | | |
| Badlands (W) | 90TH | 0.0166 | .3598 | 19.7 | 26.2 | 22.7 | 24.7 | 37.4 | 27.2 | 22.5 | 24.0 | | |
| Bandelier (W) | 90TH | 0.0337 | .1375 | 9.2 | 15.2 | 6.1 | 8.7 | 10.9 | 10.0 | 11.3 | 11.6 | | |
| Big Bend NP | 90TH | 0.0019 | .5476 | 22.6 | 21.9 | 24.2 | 20.6 | 24.7 | 19.9 | 27.6 | 21.3 | | |
| Bryce Canyon NP | 90TH | 0.0086 | .4524 | 11.0 | 11.9 | 10.5 | 9.3 | 11.6 | 9.9 | 11.0 | 12.3 | | |
| Brider (W) | 90TH | -.0155 | .1375 | 7.1 | 8.6 | 7.3 | 7.2 | 9.5 | 6.8 | 6.4 | 6.9 | | |
| Canyonlands NP | 90TH | -.0229 | .0894 | 9.8 | 8.8 | 10.8 | 7.6 | 9.4 | 8.7 | 8.0 | 8.4 | | |
| Chiricahua (W) | 90TH | -.0034 | .4524 | 16.0 | 13.5 | 12.9 | 10.4 | 13.3 | 14.6 | 12.5 | 15.8 | | |
| Crater Lake NP | 90TH | 0.0145 | .3598 | 9.2 | 13.8 | 10.4 | 9.6 | 13.7 | 13.4 | 10.7 | 11.2 | | |
| Denali NP | 90TH | -.0088 | .4524 | 10.8 | 10.4 | 13.5 | 6.5 | 10.1 | 6.4 | 11.6 | 11.4 | | |
| Glacier NP | 90TH | -.0159 | .4524 | 16.2 | 23.1 | 20.0 | 19.7 | 25.7 | 20.9 | 18.1 | 18.4 | | |
| Grand Canyon NP | 90TH | -.0061 | .4524 | 9.7 | 9.4 | 9.8 | 8.6 | 10.1 | 8.4 | 10.0 | 9.0 | | |
| Great Sand Dunes (W) | 90TH | 0.0040 | .5476 | 10.6 | 9.2 | 7.6 | 7.0 | 9.5 | 9.5 | 8.2 | 9.9 | | |
| Great Smoky Mtns NP | 90TH | 0.0189 | .1994 | 84.7 | 120.5 | 153.0 | 127.4 | 129.9 | 110.7 | 125.1 | 134.5 | | |
| Guadalupe Mtns NP | 90TH | -.0155 | .3598 | 20.7 | 25.0 | 15.2 | 18.0 | 19.5 | 18.9 | 19.5 | 18.3 | | |
| Lassen Volcanic NP | 90TH | 0.0227 | .3598 | 8.1 | 11.0 | 7.7 | 4.9 | 11.1 | 9.0 | 10.2 | 9.6 | | |
| Mesa Verde NP | 90TH | -.0016 | .5476 | 10.1 | 11.6 | 10.3 | 8.3 | 11.0 | 10.2 | 10.1 | 10.6 | | |
| Mt. Rainier NP | 90TH | -.0201 | .2742 | 45.2 | 65.9 | 93.1 | 65.4 | 66.6 | 55.4 | 63.0 | 51.2 | | |
| Petrified Forest NP | 90TH | -.0049 | .5476 | 11.5 | 11.1 | 11.9 | 10.2 | 13.6 | 10.3 | 10.2 | 13.2 | | |
| Pinnacles (W) | 90TH | 0.0029 | .5476 | 16.2 | 18.6 | 21.3 | 19.0 | 20.4 | 16.1 | 19.4 | 18.3 | | |
| Pt. Reyes NS | 90TH | 0.0419 | .0894 | 23.5 | 29.8 | 29.1 | 30.9 | 41.5 | 28.9 | 30.3 | 36.1 | | |
| Redwood NP | 90TH | -.0200 | .2742 | 31.8 | 42.4 | 44.3 | 43.5 | 42.0 | 30.9 | 34.0 | 37.2 | | |
| Rocky Mtns NP | 90TH | -.0098 | .4524 | 9.2 | 11.8 | 9.4 | 9.5 | 9.0 | 10.8 | 8.0 | 10.5 | | |
| San Gorgonio (W) | 90TH | -.0300 | .0543 | 17.7 | 17.1 | 16.7 | 16.7 | 21.1 | 17.1 | 14.4 | 14.2 | | |
| Shenandoah NP | 90TH | 0.0170 | .1994 | 151.3 | 171.3 | 183.9 | 200.8 | 190.9 | 163.3 | 180.9 | 184.9 | | |
| Tonto NM | 90TH | -.0208 | .1994 | 12.3 | 10.6 | 11.7 | 11.7 | 10.7 | 9.3 | 9.9 | 11.7 | | |
| Washington, DC | 90TH | 0.0286 | .3598 | 103.4 | 107.5 | 85.4 | 171.9 | 170.8 | 141.8 | 133.5 | 117.6 | | |
| Weminuche (W) | 90TH | 0.0078 | .4524 | 8.4 | 12.2 | 9.8 | 8.1 | 10.4 | 10.8 | 8.9 | 10.1 | | |
| Yellowstone NP | 90TH | -.0054 | .5476 | 4.5 | 6.7 | 5.7 | 5.8 | 6.1 | 5.0 | 5.8 | 5.4 | | |
| Yosemite NP | 90TH | -.0046 | .4524 | 14.2 | 14.7 | 12.8 | 12.8 | 16.7 | 14.9 | 12.6 | 13.0 | | |

* Denotes that the slope is significant at the .05 significance level.

NP = National Park

W = Wilderness

NS = National Seashore

NM = National Monument

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995**LIGHT EXTINCTION DUE TO ORGANIC CARBON (Mm⁻¹)**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|----------------------|------------|---------|-------|--------------------------|------|------|------|------|------|------|------|------|------|
| | | | | * | ** | | | | | | | | |
| Acadia NP | 10TH | -.1079* | .0156 | 4.6 | 4.4 | 4.9 | 4.4 | 2.6 | 3.4 | 2.8 | 2.3 | | |
| Badlands (W) | 10TH | -.1399* | .0009 | 5.2 | 4.1 | 4.3 | 2.9 | 2.3 | 2.3 | 2.2 | 2.0 | | |
| Bandelier (W) | 10TH | -.0995* | .0156 | 4.0 | 4.2 | 4.6 | 3.8 | 2.7 | 3.2 | 2.7 | 2.0 | | |
| Big Bend NP | 10TH | -.0786* | .0305 | 4.5 | 3.7 | 4.6 | 2.9 | 1.9 | 2.7 | 2.7 | 2.6 | | |
| Bryce Canyon NP | 10TH | -.1209* | .0156 | 2.6 | 2.7 | 3.2 | 2.1 | 1.5 | 1.4 | 1.5 | 1.3 | | |
| Bridger (W) | 10TH | -.1263 | .0894 | 2.6 | 2.6 | 3.5 | 1.4 | 0.9 | 1.1 | 1.4 | 1.2 | | |
| Canyonlands NP | 10TH | -.0908* | .0305 | 2.7 | 2.8 | 3.8 | 2.5 | 1.4 | 1.9 | 1.8 | 1.6 | | |
| Chiricahua (W) | 10TH | -.1156* | .0305 | 4.2 | 3.1 | 3.4 | 2.3 | 1.8 | 1.8 | 1.8 | 2.1 | | |
| Crater Lake NP | 10TH | -.1479* | .0071 | 2.9 | 3.5 | 3.7 | 1.6 | 1.6 | 1.3 | 1.2 | 1.1 | | |
| Denali NP | 10TH | -.2124* | .0071 | 3.3 | 2.3 | 3.2 | 2.5 | 0.9 | 1.0 | 0.9 | 0.8 | | |
| Glacier NP | 10TH | -.0875* | .0156 | 6.1 | 5.2 | 6.2 | 5.6 | 4.0 | 4.7 | 3.6 | 3.6 | | |
| Grand Canyon NP | 10TH | -.1196* | .0305 | 2.2 | 2.8 | 3.7 | 2.6 | 1.8 | 1.6 | 1.4 | 1.6 | | |
| Great Sand Dunes (W) | 10TH | -.1621* | .0028 | 4.3 | 4.1 | 5.4 | 3.7 | 2.4 | 2.0 | 2.1 | 1.5 | | |
| Great Smoky Mtns NP | 10TH | -.0756* | .0002 | 7.4 | 6.7 | 6.7 | 5.9 | 5.0 | 4.9 | 4.7 | 4.4 | | |
| Guadalupe Mtns NP | 10TH | -.1035* | .0071 | 4.5 | 4.6 | 4.2 | 2.5 | 2.6 | 2.7 | 2.4 | 2.3 | | |
| Lassen Volcanic NP | 10TH | -.1024* | .0156 | 3.3 | 3.4 | 4.5 | 2.7 | 2.2 | 2.3 | 2.2 | 1.6 | | |
| Mesa Verde NP | 10TH | -.1209* | .0071 | 3.5 | 2.8 | 3.4 | 2.6 | 1.9 | 1.4 | 2.1 | 1.6 | | |
| Mt. Rainier NP | 10TH | -.0974* | .0305 | 3.9 | 3.3 | 4.1 | 3.9 | 3.5 | 2.9 | 2.0 | 2.4 | | |
| Petrified Forest NP | 10TH | -.1108* | .0156 | 3.5 | 4.3 | 4.7 | 4.2 | 3.1 | 2.4 | 2.8 | 2.0 | | |
| Pinnacles (W) | 10TH | -.0865* | .0071 | 4.6 | 4.6 | 6.0 | 3.9 | 3.0 | 3.5 | 3.0 | 2.7 | | |
| Pt. Reyes NS | 10TH | -.0904* | .0028 | 3.7 | 3.5 | 3.2 | 3.0 | 2.4 | 2.0 | 2.0 | 2.1 | | |
| Redwood NP | 10TH | -.1567* | .0028 | 4.1 | 3.5 | 4.5 | 3.1 | 2.3 | 1.8 | 1.6 | 1.7 | | |
| Rocky Mtns NP | 10TH | -.1441* | .0071 | 4.2 | 2.6 | 4.0 | 1.7 | 2.1 | 1.5 | 1.7 | 1.4 | | |
| San Gorgonio (W) | 10TH | -.1042* | .0305 | 3.9 | 2.5 | 4.9 | 2.1 | 1.8 | 2.3 | 1.5 | 1.9 | | |
| Shenandoah NP | 10TH | -.1024* | .0156 | 8.0 | 5.1 | 5.9 | 4.3 | 3.1 | 4.2 | 3.2 | 3.8 | | |
| Tonto NM | 10TH | -.0988* | .0028 | 6.4 | 4.4 | 5.0 | 3.2 | 3.3 | 3.1 | 2.8 | 2.9 | | |
| Washington, DC | 10TH | -.0403 | .0543 | 10.1 | 11.4 | 10.4 | 9.7 | 9.3 | 11.1 | 9.4 | 6.0 | | |
| Weminuche (W) | 10TH | -.1479* | .0071 | 3.6 | 3.0 | 3.1 | 2.1 | 1.5 | 1.6 | 1.7 | 1.3 | | |
| Yellowstone NP | 10TH | -.1696* | .0071 | 5.4 | 3.6 | 5.6 | 4.0 | 2.5 | 1.9 | 1.9 | 1.7 | | |
| Yosemite NP | 10TH | -.1100 | .0894 | 3.4 | 2.7 | 5.0 | 2.2 | 1.6 | 2.2 | 1.5 | 2.3 | | |
| Acadia NP | 50TH | -.0487* | .0305 | 6.8 | 6.8 | 6.0 | 6.8 | 5.5 | 5.6 | 5.8 | 4.7 | | |
| Badlands (W) | 50TH | -.0940* | .0028 | 6.0 | 6.2 | 6.2 | 5.6 | 4.1 | 3.9 | 3.9 | 3.4 | | |
| Bandelier (W) | 50TH | -.0955* | .0156 | 6.6 | 5.9 | 6.6 | 6.9 | 4.5 | 4.1 | 3.6 | 3.5 | | |
| Big Bend NP | 50TH | -.0719* | .0009 | 7.2 | 6.5 | 6.2 | 6.0 | 4.4 | 4.9 | 4.8 | 4.3 | | |
| Bryce Canyon NP | 50TH | -.0916* | .0071 | 4.9 | 4.8 | 4.6 | 4.4 | 2.6 | 2.9 | 2.8 | 2.8 | | |
| Bridger (W) | 50TH | -.1305* | .0028 | 4.9 | 4.3 | 5.4 | 4.2 | 3.4 | 2.4 | 2.8 | 2.3 | | |
| Canyonlands NP | 50TH | -.1174* | .0305 | 5.3 | 4.6 | 6.0 | 4.6 | 2.8 | 3.2 | 3.6 | 2.3 | | |
| Chiricahua (W) | 50TH | -.1162* | .0028 | 6.6 | 5.0 | 5.2 | 4.7 | 3.2 | 3.2 | 2.6 | 3.0 | | |
| Crater Lake NP | 50TH | -.1082 | .0894 | 4.8 | 6.0 | 7.1 | 4.9 | 3.9 | 2.7 | 5.6 | 2.6 | | |
| Denali NP | 50TH | -.1926* | .0028 | 3.5 | 3.3 | 3.6 | 2.8 | 1.8 | 1.2 | 1.5 | 1.1 | | |
| Glacier NP | 50TH | -.0597* | .0009 | 12.7 | 11.4 | 11.7 | 10.8 | 10.2 | 9.3 | 9.7 | 6.8 | | |
| Grand Canyon NP | 50TH | -.0750* | .0071 | 4.3 | 4.1 | 5.2 | 4.3 | 3.0 | 3.0 | 2.8 | 2.6 | | |
| Great Sand Dunes (W) | 50TH | -.1072* | .0028 | 5.8 | 5.1 | 5.7 | 5.5 | 3.9 | 3.0 | 3.4 | 2.8 | | |
| Great Smoky Mtns NP | 50TH | -.0445* | .0305 | 10.8 | 11.9 | 12.9 | 10.4 | 9.9 | 10.7 | 8.1 | 9.3 | | |
| Guadalupe Mtns NP | 50TH | -.0738* | .0028 | 6.7 | 6.0 | 5.9 | 5.0 | 3.3 | 4.7 | 4.3 | 4.0 | | |
| Lassen Volcanic NP | 50TH | -.0978* | .0305 | 5.0 | 6.5 | 7.3 | 5.5 | 5.0 | 3.8 | 4.0 | 3.6 | | |
| Mesa Verde NP | 50TH | -.1156* | .0156 | 7.0 | 4.1 | 4.5 | 4.5 | 3.0 | 2.9 | 3.2 | 2.5 | | |
| Mt. Rainier NP | 50TH | -.0678* | .0028 | 9.4 | 9.4 | 11.7 | 9.0 | 9.0 | 8.6 | 7.0 | 5.5 | | |

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995 (continued)**LIGHT EXTINCTION DUE TO ORGANIC CARBON (Mm^{-1})**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|----------------------|------------|---------|-------|-----------------------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | | |
| Petrified Forest NP | 50TH | -.0893* | .0028 | 6.8 | 5.3 | 6.2 | 6.0 | 4.5 | 3.8 | 4.2 | 3.5 | | |
| Pinnacles (W) | 50TH | -.0824* | .0071 | 9.6 | 9.5 | 10.1 | 7.8 | 7.0 | 7.8 | 6.1 | 5.6 | | |
| Pt. Reyes NS | 50TH | -.1719* | .0156 | 5.3 | 6.8 | 8.1 | 6.2 | 4.0 | 3.0 | 3.4 | 2.4 | | |
| Redwood NP | 50TH | -.1247* | .0156 | 5.6 | 5.6 | 7.3 | 6.0 | 5.1 | 4.6 | 4.0 | 2.6 | | |
| Rocky Mtns NP | 50TH | -.1371* | .0002 | 6.1 | 5.9 | 5.5 | 4.8 | 3.9 | 3.1 | 3.7 | 2.2 | | |
| San Gorgonio (W) | 50TH | -.0527 | .1375 | 10.1 | 10.0 | 9.3 | 11.4 | 7.0 | 11.5 | 7.6 | 6.1 | | |
| Shenandoah NP | 50TH | -.0524* | .0071 | 11.1 | 9.3 | 11.6 | 9.7 | 8.8 | 7.9 | 8.1 | 7.7 | | |
| Tonto NM | 50TH | -.0604* | .0028 | 7.2 | 6.5 | 7.0 | 5.5 | 5.8 | 5.4 | 4.1 | 5.1 | | |
| Washington, DC | 50TH | 0.0031 | .5476 | 15.8 | 18.0 | 16.9 | 18.5 | 16.2 | 19.2 | 18.0 | 12.1 | | |
| Weminuche (W) | 50TH | -.1176* | .0009 | 5.2 | 4.7 | 4.5 | 4.6 | 3.0 | 2.7 | 2.8 | 2.3 | | |
| Yellowstone NP | 50TH | -.0996* | .0305 | 5.0 | 6.3 | 6.6 | 5.9 | 4.4 | 3.5 | 4.4 | 3.1 | | |
| Yosemite NP | 50TH | -.0181 | .3598 | 6.7 | 7.7 | 8.2 | 7.8 | 7.1 | 6.4 | 5.6 | 7.9 | | |
| Acadia NP | 90TH | -.0291 | .1375 | 17.6 | 17.2 | 13.2 | 16.6 | 12.1 | 14.3 | 14.2 | 14.4 | | |
| Badlands (W) | 90TH | -.0456 | .2742 | 12.1 | 8.7 | 9.8 | 11.0 | 6.7 | 5.6 | 12.7 | 8.2 | | |
| Bandelier (W) | 90TH | -.0550* | .0156 | 9.3 | 8.8 | 8.1 | 8.0 | 8.9 | 8.1 | 6.7 | 6.0 | | |
| Big Bend NP | 90TH | -.0321 | .1375 | 11.3 | 13.0 | 8.2 | 10.6 | 6.8 | 9.9 | 8.9 | 9.4 | | |
| Bryce Canyon NP | 90TH | -.0589 | .0543 | 6.8 | 7.0 | 6.5 | 5.7 | 5.3 | 7.1 | 5.5 | 4.5 | | |
| Brider (W) | 90TH | -.0674 | .0894 | 9.6 | 7.0 | 7.8 | 6.9 | 6.9 | 4.7 | 8.2 | 5.4 | | |
| Canyonlands NP | 90TH | -.1195* | .0028 | 8.7 | 8.0 | 7.1 | 6.3 | 4.4 | 4.7 | 4.1 | 4.4 | | |
| Chiricahua (W) | 90TH | -.0327 | .2742 | 9.3 | 6.7 | 8.0 | 6.9 | 7.1 | 7.3 | 7.5 | 6.0 | | |
| Crater Lake NP | 90TH | -.0568 | .3598 | 12.7 | 11.4 | 13.6 | 11.5 | 6.9 | 7.9 | 15.4 | 8.3 | | |
| Denali NP | 90TH | -.0643 | .3598 | 5.0 | 4.9 | 6.6 | 12.6 | 2.6 | 9.1 | 5.6 | 2.0 | | |
| Glacier NP | 90TH | -.0034 | .4524 | 19.3 | 25.2 | 27.4 | 23.0 | 18.9 | 23.4 | 25.0 | 20.0 | | |
| Grand Canyon NP | 90TH | -.0631* | .0028 | 7.9 | 7.7 | 7.8 | 5.6 | 5.3 | 6.9 | 4.9 | 4.8 | | |
| Great Sand Dunes (W) | 90TH | -.0951* | .0071 | 9.2 | 7.8 | 6.9 | 6.5 | 4.3 | 4.9 | 6.1 | 4.6 | | |
| Great Smoky Mtns NP | 90TH | -.0375 | .1994 | 28.0 | 17.3 | 22.1 | 21.5 | 15.5 | 19.7 | 18.6 | 19.8 | | |
| Guadalupe Mtns NP | 90TH | -.0752* | .0071 | 9.2 | 9.1 | 7.4 | 7.8 | 5.9 | 6.7 | 6.8 | 5.1 | | |
| Lassen Volcanic NP | 90TH | -.0306 | .0894 | 11.1 | 12.4 | 10.1 | 9.4 | 9.2 | 10.1 | 10.6 | 8.7 | | |
| Mesa Verde NP | 90TH | -.0760 | .0543 | 7.9 | 7.2 | 8.0 | 5.8 | 3.9 | 5.6 | 5.8 | 4.6 | | |
| Mt. Rainier NP | 90TH | -.0532* | .0305 | 21.4 | 23.3 | 26.0 | 21.4 | 22.0 | 19.4 | 18.1 | 15.7 | | |
| Petrified Forest NP | 90TH | -.0958* | .0028 | 10.4 | 8.6 | 8.2 | 7.3 | 6.3 | 6.7 | 4.9 | 6.5 | | |
| Pinnacles (W) | 90TH | -.0584* | .0156 | 13.9 | 18.6 | 16.0 | 14.3 | 12.3 | 12.9 | 11.0 | 11.8 | | |
| Pt. Reyes NS | 90TH | -.1305 | .0543 | 11.2 | 19.0 | 15.4 | 12.9 | 9.0 | 12.9 | 7.1 | 7.3 | | |
| Redwood NP | 90TH | -.0590* | .0071 | 16.7 | 15.0 | 13.9 | 11.4 | 13.3 | 12.3 | 6.7 | 11.9 | | |
| Rocky Mtns NP | 90TH | -.0751* | .0156 | 9.5 | 10.9 | 9.6 | 7.6 | 6.9 | 6.5 | 8.7 | 6.1 | | |
| San Gorgonio (W) | 90TH | -.0594* | .0071 | 20.5 | 19.2 | 17.9 | 17.1 | 19.4 | 15.2 | 15.6 | 10.3 | | |
| Shenandoah NP | 90TH | -.0215 | .1375 | 26.9 | 18.0 | 20.2 | 19.8 | 16.8 | 11.4 | 18.9 | 19.4 | | |
| Tonto NM | 90TH | -.0236 | .4524 | 10.3 | 15.0 | 7.7 | 8.5 | 9.2 | 13.9 | 6.0 | 10.3 | | |
| Washington, DC | 90TH | -.0032 | .5476 | 31.7 | 22.8 | 29.2 | 28.5 | 24.8 | 35.7 | 30.5 | 24.8 | | |
| Weminuche (W) | 90TH | -.1003* | .0071 | 9.0 | 8.4 | 7.9 | 5.7 | 4.7 | 4.7 | 4.8 | 4.7 | | |
| Yellowstone NP | 90TH | -.0718 | .0894 | 12.7 | 10.2 | 10.7 | 9.3 | 9.5 | 7.5 | 15.6 | 7.0 | | |
| Yosemite NP | 90TH | 0.0534 | .3598 | 22.2 | 14.5 | 16.6 | 16.5 | 18.4 | 12.3 | 21.0 | 21.9 | | |

* Denotes that the slope is significant at the .05 significance level.

NP = National Park

W = Wilderness

NS = National Seashore

NM = National Monument

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995**DECIVIEW**

| SITE | PERCENTILE | SLOPE | LEVEL | OBSERVED SIGNIFICANCE | | | | | | | |
|----------------------|------------|---------|-------|-----------------------|------|------|------|------|------|------|------|
| | | | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
| Acadia NP | 10TH | -.0294* | .0305 | 13.0 | 14.1 | 14.2 | 13.4 | 11.7 | 12.6 | 11.3 | 11.3 |
| Badlands (W) | 10TH | -.0229* | .0305 | 10.3 | 9.5 | 9.7 | 9.7 | 10.0 | 9.5 | 8.9 | 7.8 |
| Bandelier (W) | 10TH | -.0404 | .0894 | 8.1 | 9.7 | 10.4 | 9.3 | 8.5 | 8.9 | 8.3 | 6.0 |
| Big Bend NP | 10TH | -.0237 | .0894 | 10.1 | 10.3 | 10.7 | 9.5 | 8.2 | 9.6 | 8.6 | 9.1 |
| Bryce Canyon NP | 10TH | -.0592 | .0894 | 6.6 | 5.8 | 6.8 | 7.2 | 6.7 | 6.2 | 5.2 | 4.2 |
| Bridger (W) | 10TH | -.0481 | .0543 | 5.0 | 5.4 | 6.6 | 5.0 | 5.3 | 4.3 | 4.9 | 3.2 |
| Canyonlands NP | 10TH | -.0552 | .0543 | 7.1 | 7.9 | 9.0 | 8.3 | 6.9 | 7.4 | 6.6 | 4.9 |
| Chiricahua (W) | 10TH | -.0210* | .0305 | 8.2 | 7.9 | 8.3 | 8.0 | 7.2 | 7.8 | 7.1 | 7.3 |
| Crater Lake NP | 10TH | -.0395 | .0543 | 5.8 | 6.5 | 6.6 | 6.5 | 6.3 | 5.1 | 5.5 | 3.8 |
| Denali NP | 10TH | -.0587* | .0071 | 5.4 | 5.0 | 7.6 | 5.3 | 4.5 | 4.2 | 4.2 | 3.7 |
| Glacier NP | 10TH | -.0163 | .2742 | 10.9 | 11.4 | 12.2 | 12.7 | 12.5 | 11.7 | 10.3 | 9.7 |
| Grand Canyon NP | 10TH | -.0145 | .3598 | 5.8 | 6.1 | 8.1 | 7.2 | 7.1 | 5.9 | 5.3 | 6.1 |
| Great Sand Dunes (W) | 10TH | -.0908* | .0071 | 8.6 | 8.0 | 9.7 | 9.1 | 7.5 | 6.9 | 6.2 | 4.6 |
| Great Smoky Mtns NP | 10TH | -.0120* | .0305 | 15.9 | 16.4 | 16.1 | 16.2 | 15.4 | 15.6 | 15.0 | 15.2 |
| Guadalupe Mtns NP | 10TH | -.0168 | .1375 | 10.0 | 11.1 | 10.3 | 8.4 | 9.3 | 9.9 | 8.6 | 9.6 |
| Lassen Volcanic NP | 10TH | -.0585 | .0543 | 5.6 | 6.3 | 7.1 | 4.7 | 6.1 | 4.9 | 4.7 | 4.0 |
| Mesa Verde NP | 10TH | -.0686 | .0894 | 7.7 | 6.8 | 9.2 | 8.1 | 7.0 | 6.5 | 7.0 | 4.5 |
| Mt. Rainier NP | 10TH | -.0400 | .2742 | 9.0 | 8.5 | 10.1 | 10.3 | 11.9 | 9.3 | 7.4 | 6.4 |
| Petrified Forest NP | 10TH | -.0575* | .0305 | 8.4 | 10.3 | 10.4 | 10.2 | 8.8 | 8.0 | 8.1 | 6.7 |
| Pinnacles (W) | 10TH | -.0405* | .0156 | 11.6 | 11.9 | 14.1 | 10.8 | 10.2 | 11.5 | 9.4 | 9.2 |
| Pt. Reyes NS | 10TH | -.0221 | .1375 | 11.6 | 12.2 | 14.5 | 12.7 | 11.9 | 12.6 | 11.3 | 10.2 |
| Redwood NP | 10TH | -.0357* | .0156 | 10.6 | 9.6 | 11.4 | 9.6 | 10.1 | 8.6 | 8.4 | 8.3 |
| Rocky Mtns NP | 10TH | -.0241 | .1375 | 6.8 | 5.8 | 6.6 | 5.9 | 6.2 | 6.0 | 6.1 | 4.0 |
| San Gorgonio (W) | 10TH | -.0373 | .1994 | 8.4 | 7.9 | 11.3 | 7.8 | 6.8 | 7.9 | 6.0 | 8.1 |
| Shenandoah NP | 10TH | -.0085 | .1994 | 18.4 | 17.0 | 17.6 | 18.0 | 15.8 | 17.9 | 15.8 | 17.2 |
| Tonto NM | 10TH | -.0302* | .0156 | 10.2 | 10.0 | 10.9 | 9.3 | 9.5 | 8.8 | 8.1 | 8.9 |
| Washington, DC | 10TH | -.0004 | .4524 | 21.7 | 22.3 | 22.6 | 22.2 | 22.3 | 23.7 | 22.2 | 19.3 |
| Weminuche (W) | 10TH | 0.0051 | .5476 | 5.7 | 6.1 | 6.8 | 7.4 | 7.2 | 6.0 | 7.2 | 4.3 |
| Yellowstone NP | 10TH | -.0848* | .0071 | 8.3 | 7.7 | 8.9 | 8.0 | 6.6 | 5.2 | 5.4 | 5.0 |
| Yosemite NP | 10TH | -.0115 | .2742 | 5.9 | 5.4 | 8.9 | 5.8 | 6.3 | 5.9 | 4.9 | 5.7 |
| Acadia NP | 50TH | -.0169 | .1375 | 18.1 | 20.3 | 18.7 | 18.9 | 17.8 | 18.1 | 18.2 | 16.7 |
| Badlands (W) | 50TH | -.0130 | .0543 | 14.8 | 15.3 | 14.7 | 15.1 | 14.9 | 13.4 | 13.9 | 13.8 |
| Bandelier (W) | 50TH | -.0386* | .0071 | 11.9 | 12.4 | 12.7 | 12.2 | 11.6 | 11.3 | 10.6 | 9.1 |
| Big Bend NP | 50TH | -.0049 | .1375 | 14.4 | 15.0 | 14.4 | 14.1 | 14.1 | 14.2 | 14.5 | 13.9 |
| Bryce Canyon NP | 50TH | -.0183 | .0543 | 11.5 | 11.5 | 10.6 | 11.5 | 10.5 | 10.6 | 11.1 | 8.8 |
| Bridger (W) | 50TH | -.0285 | .1375 | 9.0 | 9.1 | 10.2 | 9.6 | 9.9 | 8.1 | 8.6 | 7.4 |
| Canyonlands NP | 50TH | -.0257 | .0543 | 10.9 | 10.7 | 12.4 | 12.0 | 10.8 | 10.7 | 10.7 | 8.4 |
| Chiricahua (W) | 50TH | -.0190* | .0156 | 12.4 | 11.9 | 12.4 | 11.6 | 11.0 | 11.9 | 11.4 | 10.7 |
| Crater Lake NP | 50TH | 0.0033 | .5476 | 8.8 | 10.3 | 11.1 | 11.7 | 11.1 | 9.3 | 11.4 | 8.1 |
| Denali NP | 50TH | -.0517* | .0156 | 8.1 | 8.9 | 10.1 | 7.5 | 6.7 | 6.6 | 7.4 | 5.9 |
| Glacier NP | 50TH | -.0095 | .1994 | 16.6 | 16.3 | 16.9 | 17.0 | 17.0 | 15.8 | 16.3 | 14.8 |
| Grand Canyon NP | 50TH | -.0269 | .0543 | 10.2 | 10.8 | 11.9 | 11.2 | 10.7 | 10.1 | 10.1 | 9.3 |
| Great Sand Dunes (W) | 50TH | -.0366* | .0156 | 11.1 | 12.1 | 12.0 | 11.6 | 11.2 | 9.7 | 10.0 | 8.7 |
| Great Smoky Mtns NP | 50TH | 0.0051 | .4524 | 21.6 | 22.3 | 22.5 | 21.5 | 23.0 | 23.5 | 20.3 | 22.1 |
| Guadalupe Mtns NP | 50TH | -.0071 | .3598 | 13.8 | 14.4 | 15.2 | 13.2 | 12.3 | 13.2 | 14.1 | 13.3 |
| Lassen Volcanic NP | 50TH | -.0204* | .0305 | 10.9 | 10.6 | 10.8 | 9.4 | 10.1 | 9.8 | 10.1 | 9.0 |
| Mesa Verde NP | 50TH | -.0169 | .1994 | 10.8 | 10.0 | 10.4 | 11.2 | 9.8 | 10.0 | 10.6 | 8.6 |
| Mt. Rainier NP | 50TH | 0.0020 | .5476 | 17.6 | 16.9 | 17.0 | 18.8 | 19.4 | 19.1 | 17.4 | 15.8 |

Table A-12. Trends From IMPROVE Monitoring Sites, 1988–1995 (continued)

| SITE | PERCENTILE | SLOPE | LEVEL | DECIVIEW | | | | | | | | | |
|----------------------|------------|---------|-------|-----------------------|------|------|------|------|------|------|------|------|------|
| | | | | OBSERVED SIGNIFICANCE | | | | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
| Petrified Forest NP | 50TH | -.0338* | .0305 | 12.8 | 13.1 | 14.0 | 13.7 | 12.6 | 11.4 | 11.8 | 10.2 | | |
| Pinnacles (W) | 50TH | -.0194 | .0543 | 17.1 | 17.6 | 18.5 | 17.1 | 16.5 | 17.1 | 15.3 | 15.6 | | |
| Pt. Reyes NS | 50TH | -.0225 | .0543 | 17.4 | 18.3 | 19.3 | 17.9 | 16.4 | 16.7 | 17.1 | 14.9 | | |
| Redwood NP | 50TH | -.0123 | .0894 | 15.8 | 16.5 | 17.7 | 16.4 | 16.2 | 14.7 | 15.8 | 15.4 | | |
| Rocky Mtns NP | 50TH | -.0183 | .0894 | 11.2 | 11.4 | 11.6 | 11.0 | 11.6 | 10.2 | 11.0 | 8.6 | | |
| San Gorgonio (W) | 50TH | -.0089 | .1994 | 18.7 | 19.6 | 19.5 | 20.0 | 17.5 | 19.8 | 18.3 | 17.2 | | |
| Shenandoah NP | 50TH | -.0050 | .1994 | 25.3 | 23.6 | 24.7 | 25.2 | 25.3 | 25.1 | 23.9 | 23.4 | | |
| Tonto NM | 50TH | -.0195* | .0305 | 13.4 | 14.4 | 13.7 | 13.5 | 13.6 | 13.2 | 12.4 | 12.4 | | |
| Washington, DC | 50TH | 0.0023 | .3598 | 24.9 | 27.4 | 27.3 | 28.7 | 28.4 | 28.7 | 27.5 | 25.4 | | |
| Weminuche (W) | 50TH | -.0160* | .0305 | 10.6 | 11.2 | 10.8 | 10.9 | 10.6 | 10.2 | 10.5 | 8.3 | | |
| Yellowstone NP | 50TH | -.0383 | .0543 | 10.2 | 10.8 | 11.5 | 11.6 | 10.4 | 9.8 | 9.6 | 7.9 | | |
| Yosemite NP | 50TH | 0.0006 | .5476 | 12.8 | 12.9 | 13.9 | 14.0 | 14.4 | 13.0 | 11.9 | 12.9 | | |
| Acadia NP | 90TH | 0.0018 | .5476 | 26.8 | 27.5 | 25.8 | 25.9 | 27.2 | 27.3 | 27.5 | 25.1 | | |
| Badlands (W) | 90TH | 0.0049 | .4524 | 19.2 | 18.8 | 18.8 | 19.1 | 21.6 | 19.4 | 20.1 | 18.7 | | |
| Bandelier (W) | 90TH | -.0082 | .4524 | 14.3 | 16.5 | 12.9 | 14.0 | 15.0 | 14.5 | 14.6 | 13.4 | | |
| Big Bend NP | 90TH | -.0012 | .3598 | 19.1 | 19.5 | 18.5 | 19.0 | 18.1 | 18.5 | 19.3 | 19.0 | | |
| Bryce Canyon NP | 90TH | -.0062 | .1994 | 14.1 | 15.0 | 13.5 | 13.9 | 13.9 | 14.2 | 13.9 | 13.0 | | |
| Brider (W) | 90TH | -.0134 | .0543 | 13.3 | 13.2 | 13.3 | 12.9 | 13.9 | 11.5 | 12.6 | 11.2 | | |
| Canyonlands NP | 90TH | -.0292* | .0156 | 14.6 | 15.1 | 15.1 | 14.6 | 13.1 | 13.6 | 13.4 | 11.7 | | |
| Chiricahua (W) | 90TH | -.0033 | .1994 | 16.3 | 15.2 | 15.2 | 15.1 | 15.1 | 15.7 | 15.8 | 14.9 | | |
| Crater Lake NP | 90TH | 0.0008 | .5476 | 15.6 | 16.6 | 16.3 | 15.9 | 15.7 | 16.8 | 16.8 | 14.2 | | |
| Denali NP | 90TH | -.0205 | .2742 | 12.5 | 12.4 | 14.8 | 13.7 | 11.1 | 12.5 | 12.9 | 10.8 | | |
| Glacier NP | 90TH | -.0046 | .3598 | 19.9 | 21.9 | 21.8 | 22.0 | 22.3 | 21.5 | 21.4 | 20.9 | | |
| Grand Canyon NP | 90TH | -.0114 | .1375 | 13.9 | 14.9 | 15.0 | 13.4 | 13.6 | 13.8 | 13.8 | 12.9 | | |
| Great Sand Dunes (W) | 90TH | -.0273 | .0894 | 14.6 | 15.7 | 14.5 | 14.4 | 12.8 | 13.2 | 16.6 | 12.4 | | |
| Great Smoky Mtns NP | 90TH | 0.0037 | .4524 | 27.3 | 28.7 | 30.9 | 29.7 | 29.4 | 28.5 | 29.2 | 29.4 | | |
| Guadalupe Mtns NP | 90TH | -.0115 | .0894 | 18.4 | 19.3 | 17.7 | 17.1 | 16.8 | 17.2 | 18.2 | 17.0 | | |
| Lassen Volcanic NP | 90TH | -.0076 | .3598 | 15.8 | 16.9 | 14.7 | 13.1 | 15.2 | 15.4 | 15.9 | 14.3 | | |
| Mesa Verde NP | 90TH | -.0058 | .2742 | 13.2 | 14.2 | 14.7 | 12.9 | 12.4 | 14.6 | 13.7 | 12.8 | | |
| Mt. Rainier NP | 90TH | -.0123 | .2742 | 23.7 | 25.7 | 28.0 | 25.7 | 25.8 | 24.3 | 24.9 | 23.1 | | |
| Petrified Forest NP | 90TH | -.0213* | .0156 | 15.8 | 16.4 | 16.9 | 15.6 | 15.3 | 14.7 | 14.1 | 14.9 | | |
| Pinnacles (W) | 90TH | -.0204* | .0305 | 20.6 | 22.8 | 22.7 | 21.5 | 21.7 | 20.5 | 20.1 | 20.1 | | |
| Pt. Reyes NS | 90TH | -.0126 | .2742 | 22.5 | 28.2 | 25.4 | 23.8 | 24.9 | 27.7 | 23.9 | 22.0 | | |
| Redwood NP | 90TH | -.0107 | .0894 | 22.2 | 22.9 | 23.0 | 22.6 | 22.8 | 21.1 | 20.3 | 21.6 | | |
| Rocky Mtns NP | 90TH | -.0132 | .0543 | 14.8 | 16.1 | 15.5 | 14.8 | 14.6 | 14.9 | 14.7 | 14.4 | | |
| San Gorgonio (W) | 90TH | -.0130 | .0543 | 25.6 | 26.1 | 26.7 | 25.6 | 26.5 | 24.8 | 24.6 | 22.9 | | |
| Shenandoah NP | 90TH | 0.0029 | .3598 | 31.2 | 31.5 | 32.2 | 32.7 | 32.4 | 30.9 | 31.8 | 32.0 | | |
| Tonto NM | 90TH | -.0072 | .1994 | 16.6 | 18.3 | 15.8 | 16.4 | 16.4 | 17.0 | 14.8 | 16.0 | | |
| Washington, DC | 90TH | 0.0001 | .5476 | 32.0 | 31.6 | 31.3 | 33.9 | 34.3 | 34.0 | 32.7 | 31.1 | | |
| Weminuche (W) | 90TH | -.0190* | .0156 | 13.8 | 15.3 | 14.0 | 14.0 | 13.2 | 13.5 | 13.0 | 12.7 | | |
| Yellowstone NP | 90TH | -.0254* | .0305 | 16.2 | 16.0 | 15.6 | 14.5 | 15.4 | 13.5 | 16.1 | 13.1 | | |
| Yosemite NP | 90TH | -.0044 | .2742 | 19.9 | 18.9 | 19.9 | 18.4 | 19.9 | 17.9 | 18.8 | 19.4 | | |

* Denotes that the slope is significant at the .05 significance level.

NP = National Park

W = Wilderness

NS = National Seashore

NM = National Monument

Table A-13. Condensed Nonattainment Areas List(a)

| State | Area Name(b) | Pollutant(c) | | | | | | Population(d) | | | | | |
|-------|--------------------------------------|----------------|------|-----------------|------------------|----|-----------------|----------------|-------|-----------------|------------------|------|-------|
| | | O ₃ | CO | SO ₂ | PM ₁₀ | Pb | NO ₂ | O ₃ | CO | SO ₂ | PM ₁₀ | Pb | All |
| 1 | AK Anchorage | . | 1 | . | 1 | . | . | . | 222 | . | 170 | . | 222 |
| 2 | AK Fairbanks | . | 1 | . | . | . | . | . | 30 | . | . | . | 30 |
| 3 | AK Juneau | . | . | . | 1 | . | . | . | . | . | 12 | . | 12 |
| 4 | AL Birmingham | 1 | . | . | . | . | . | 751 | . | . | . | . | 751 |
| 5 | AZ Ajo | . | . | 1 | 1 | . | . | . | . | 6 | 6 | . | 6 |
| 6 | AZ Bullhead City | . | . | . | 1 | . | . | . | . | . | 5 | . | 5 |
| 7 | AZ Douglas | . | . | 1 | 1 | . | . | . | . | 13 | 13 | . | 13 |
| 8 | AZ Miami-Hayden | . | . | 2 | 1 | . | . | . | . | 3 | 3 | . | 3 |
| 9 | AZ Morenci | . | . | 1 | . | . | . | . | . | 8 | . | . | 8 |
| 10 | AZ Nogales | . | . | . | 1 | . | . | . | . | . | 19 | . | 19 |
| 11 | AZ Paul Spur | . | . | . | 1 | . | . | . | . | . | 1 | . | 1 |
| 12 | AZ Payson | . | . | . | 1 | . | . | . | . | . | 8 | . | 8 |
| 13 | AZ Phoenix | 1 | 1 | . | 1 | . | . | 2092 | 2006 | . | 2122 | . | 2122 |
| 14 | AZ Rillito | . | . | . | 1 | . | . | . | . | . | 0 | . | 0 |
| 15 | AZ San Manuel | . | . | 1 | . | . | . | . | . | 5 | . | . | 5 |
| 16 | AZ Yuma | . | . | . | 1 | . | . | . | . | . | 54 | . | 54 |
| 17 | CA Chico | . | 1 | . | . | . | . | . | 72 | . | . | . | 72 |
| 18 | CA Imperial Valley | . | . | . | 1 | . | . | . | . | . | 92 | . | 92 |
| 19 | CA Lake Tahoe South Shore | . | 1 | . | . | . | . | . | 30 | . | . | . | 30 |
| 20 | CA Los Angeles-South Coast Air Basin | 1 | 1 | . | 1 | . | 1(e) | 13000 | 13000 | . | 13000 | . | 13000 |
| 21 | CA Mono Basin (in Mono Co.) | . | . | . | 1 | . | . | . | . | . | 0 | . | 0 |
| 22 | CA Owens Valley | . | . | . | 1 | . | . | . | . | . | 18 | . | 18 |
| 23 | CA Sacramento Metro | 1 | 1 | . | 1 | . | . | 1639 | 1097 | . | 1041 | . | 1639 |
| 24 | CA San Diego | 1 | 1 | . | . | . | . | 2498 | 2348 | . | . | . | 2498 |
| 25 | CA San Francisco-Oakland-San Jose | . | 1(f) | . | . | . | . | 3630 | . | . | . | . | 3630 |
| 26 | CA San Joaquin Valley | 1 | 3 | . | 1 | . | . | 2742 | 946 | . | 2742 | . | 2742 |
| 27 | CA Santa Barbara-Santa Maria-Lompoc | 1 | . | . | . | . | . | 370 | . | . | . | . | 370 |
| 28 | CA Searles Valley | . | . | . | 1 | . | . | . | . | . | 30 | . | 30 |
| 29 | CA Southeast Desert Modified AQMA | 1 | . | . | 2 | . | . | 384 | . | . | 349 | . | 384 |
| 30 | CA Ventura Co. | 1 | . | . | . | . | . | 669 | . | . | . | . | 669 |
| 31 | CO Aspen | . | . | . | 1 | . | . | . | . | . | 5 | . | 5 |
| 32 | CO Canon City | . | . | . | 1 | . | . | . | . | . | 12 | . | 12 |
| 33 | CO Colorado Springs | . | 1 | . | . | . | . | . | 353 | . | . | . | 353 |
| 34 | CO Denver-Boulder | . | 1 | . | 1 | . | . | 1800 | . | 1836 | . | 1836 | . |
| 35 | CO Fort Collins | . | 1 | . | . | . | . | . | 106 | . | . | . | 106 |
| 36 | CO Lamar | . | . | . | 1 | . | . | . | . | . | 8 | . | 8 |
| 37 | CO Longmont | . | 1 | . | . | . | . | . | 52 | . | . | . | 52 |
| 38 | CO Pagosa Springs | . | . | . | 1 | . | . | . | . | . | 1 | . | 1 |
| 39 | CO Steamboat Springs | . | . | . | 1 | . | . | . | . | . | 6 | . | 6 |
| 40 | CO Telluride | . | . | . | 1 | . | . | . | . | . | 1 | . | 1 |
| 41 | CT Greater Connecticut | 1 | . | . | 1 | . | . | 2470 | . | 126 | . | 2470 | . |
| 42 | DC-MD-VA Washington | 1 | . | . | . | . | . | 3923 | . | . | . | . | 3923 |
| 43 | DE Sussex Co | 1 | . | . | . | . | . | 113 | . | . | . | . | 113 |
| 44 | GA Atlanta | 1 | . | . | . | . | . | 2653 | . | . | . | . | 2653 |
| 45 | GA Muscogee Co. (Columbus) | . | . | . | . | 1 | . | . | . | . | 179 | 179 | . |
| 46 | GU Piti Power Plant | . | . | 1 | . | . | . | . | . | 0 | . | . | 0 |
| 47 | GU Tanguisson Power Plant | . | . | 1 | . | . | . | . | . | 0 | . | . | 0 |
| 48 | IA Muscatine Co. | . | . | 1 | . | . | . | . | . | 23 | . | . | 23 |
| 49 | ID Boise | . | . | . | 1 | . | . | . | . | . | 125 | . | 125 |
| 50 | ID Bonner Co.(Sandpoint) | . | . | . | 1 | . | . | . | . | . | 26 | . | 26 |
| 51 | ID Pocatello | . | . | . | 1 | . | . | . | . | . | 46 | . | 46 |
| 52 | ID Shoshone Co. | . | . | . | 2 | . | . | . | . | . | 13 | . | 13 |
| 53 | IL-IN Chicago-Gary-Lake County | 1 | . | 1 | 3 | . | . | 7887 | . | 475 | 625 | . | 7887 |
| 54 | IN Evansville | 1 | . | . | . | . | . | 165 | . | . | . | . | 165 |

Table A-13. Condensed Nonattainment Areas List(a) (continued)

| State | Area Name(b) | Pollutant(c) | | | | | Population(d) | | | | | | |
|--------------|------------------------------------|----------------|----|-----------------|------------------|------|-----------------|----------------|-------|-----------------|------------------|------|-------|
| | | O ₃ | CO | SO ₂ | PM ₁₀ | Pb | NO ₂ | O ₃ | CO | SO ₂ | PM ₁₀ | Pb | |
| 55 IN | Marion Co. (Indianapolis) | . | . | . | . | 1(g) | . | . | . | . | . | 16 | 16 |
| 56 IN | Vermillion Co. (Terre Haute) | . | . | 1 | . | . | . | . | . | 17 | . | 17 | |
| 57 KY | Boyd Co. (Ashland) | . | . | 1(h) | . | . | . | . | . | 51 | . | 51 | |
| 58 KY | Muhlenberg Co. | . | . | 1 | . | . | . | . | . | 31 | . | 31 | |
| 59 KY-IN | Louisville | 1 | . | . | . | . | . | 834 | . | . | . | 834 | |
| 60 LA | Baton Rouge | 1 | . | . | . | . | . | 559 | . | . | . | 559 | |
| 61 MA | Springfield (W. Mass) | 1 | . | . | . | . | . | 812 | . | . | . | 812 | |
| 62 MA-NH | Boston-Lawrence-Worcester | 1 | . | . | . | . | . | 5507 | . | . | . | 5507 | |
| 63 MD | Baltimore | 1 | . | . | . | . | . | 2348 | . | . | . | 2348 | |
| 64 MD | Kent and Queen Anne Cos. | 1 | . | . | . | . | . | 52 | . | . | . | 52 | |
| 65 ME | Knox and Lincoln Cos. | 1 | . | . | . | . | . | 67 | . | . | . | 67 | |
| 66 ME | Lewiston-Auburn | 1 | . | . | . | . | . | 221 | . | . | . | 221 | |
| 67 ME | Portland | 1 | . | . | . | . | . | 441 | . | . | . | 441 | |
| 68 MI | Muskegon | 1 | . | . | . | . | . | 159 | . | . | . | 159 | |
| 69 MN | Minneapolis-St. Paul | . | 1 | . | 1 | . | . | . | 2310 | . | 272 | . | 2310 |
| 70 MN | Olmsted Co. (Rochester) | . | . | 1 | . | . | . | . | . | 71 | . | . | 71 |
| 71 MO | Dent | . | . | . | . | 1 | . | . | . | . | . | 2 | 2 |
| 72 MO | Liberty-Arcadia | . | . | . | . | 1 | . | . | . | . | . | 2 | 2 |
| 73 MO-IL | St. Louis | 1 | . | . | 1(i) | 1(j) | . | 2390 | . | . | 32 | 2 | 2390 |
| 74 MT | Butte | . | . | . | 1 | . | . | . | . | . | 33 | . | 33 |
| 75 MT | Columbia Falls | . | . | . | 1 | . | . | . | . | . | 2 | . | 2 |
| 76 MT | Kalispell | . | . | . | 1 | . | . | . | . | . | 11 | . | 11 |
| 77 MT | Lame Deer | . | . | . | 1 | . | . | . | . | . | 0 | . | 0 |
| 78 MT | Lewis & Clark (E. Helena) | . | . | 1 | . | 1(k) | . | . | . | 2 | . | 2 | 2 |
| 79 MT | Libby | . | . | . | 1 | . | . | . | . | . | 2 | . | 2 |
| 80 MT | Missoula | . | 1 | . | 1 | . | . | . | 43 | . | 43 | . | 43 |
| 81 MT | Polson | . | . | . | 1 | . | . | . | . | 3 | . | 3 | |
| 82 MT | Ronan | . | . | . | 1 | . | . | . | . | 1 | . | 1 | |
| 83 MT | Thompson Falls | . | . | . | 1 | . | . | . | . | 1 | . | 1 | |
| 84 MT | Whitefish | . | . | . | 1 | . | . | . | . | 3 | . | 3 | |
| 85 MT | Yellowstone Co. (Laurel) | . | . | 1 | . | . | . | . | . | 5 | . | 5 | |
| 86 NE | Douglas Co. (Omaha) | . | . | . | . | 1 | . | . | . | . | 1 | . | 1 |
| 87 NH | Manchester | 1 | . | . | . | . | . | 222 | . | . | . | 222 | |
| 88 NH | Portsmouth-Dover-Rochester | 1 | . | . | . | . | . | 183 | . | . | . | 183 | |
| 89 NJ | Atlantic City | 1 | . | . | . | . | . | 319 | . | . | . | 319 | |
| 90 NM | Anthony | . | . | . | 1 | . | . | . | . | 1 | . | 1 | |
| 91 NM | Grant Co. | . | . | 1 | . | . | . | . | 27 | . | . | 27 | |
| 92 NM | Sunland Park | 1(l) | . | . | . | . | . | 8 | . | . | . | 8 | |
| 93 NV | Central Steptoe Valley | . | . | 1 | . | . | . | . | 2 | . | . | 2 | |
| 94 NV | Las Vegas | . | 1 | . | 1 | . | . | . | 258 | . | 741 | . | 741 |
| 95 NV | Reno | 1 | 1 | . | 1 | . | . | 255 | 134 | . | 254 | . | 255 |
| 96 NY | Albany-Schenectady-Troy | 1 | . | . | . | . | . | 874 | . | . | . | 874 | |
| 97 NY | Buffalo-Niagara Falls | 1 | . | . | . | . | . | 1189 | . | . | . | 1189 | |
| 98 NY | Essex Co. (Whiteface Mtn.) | 1 | . | . | . | . | . | 1 | . | . | . | 1 | |
| 99 NY | Jefferson Co. | 1 | . | . | . | . | . | 111 | . | . | . | 111 | |
| 100 NY | Poughkeepsie | 1 | . | . | . | . | . | 259 | . | . | . | 259 | |
| 101 NY-NJ-CT | New York-N. New Jersey-Long Island | 1 | 1 | . | 1 | . | . | 17943 | 13155 | . | 1487 | . | 17943 |
| 102 OH | Cleveland-Akron-Lorain | . | . | 3 | 1 | . | . | . | . | 1898 | 1412 | . | 1898 |
| 103 OH | Coshocton Co. | . | . | 1 | . | . | . | . | . | 35 | . | . | 35 |
| 104 OH | Gallia Co. | . | . | 1 | . | . | . | . | . | 30 | . | . | 30 |
| 105 OH | Jefferson Co. (Steubenville) | . | . | 1 | 1 | . | . | . | . | 80 | 4 | . | 80 |
| 106 OH | Lucas Co. (Toledo) | . | 1 | . | . | . | . | . | 462 | . | . | 462 | |
| 107 OH-KY | Cincinnati-Hamilton | 1 | . | . | . | . | . | 1705 | . | . | . | 1705 | |
| 108 OH-PA | Youngstown-Warren-Sharon | 1(m) | . | . | . | . | . | 121 | . | . | . | 121 | |
| 109 OR | Grants Pass | . | 1 | . | 1 | . | . | 17 | . | 17 | . | 17 | |
| 110 OR | Klamath Falls | . | 1 | . | 1 | . | . | 18 | . | 17 | . | 18 | |

Table A-13. Condensed Nonattainment Areas List(a) (continued)

| State | Area Name(b) | Pollutant(c) | | | | | | Population(d) | | | | | |
|-------|---|----------------|----|-----------------|------------------|------|-----------------|----------------|--------|-----------------|------------------|-------|---------|
| | | O ₃ | CO | SO ₂ | PM ₁₀ | Pb | NO ₂ | O ₃ | CO | SO ₂ | PM ₁₀ | Pb | All |
| 111 | OR LaGrande | . | . | . | 1 | . | . | . | . | . | 11 | . | 11 |
| 112 | OR Lakeview | . | . | . | 1 | . | . | . | . | . | 2 | . | 2 |
| 113 | OR Medford | . | 1 | . | 1 | . | . | . | 62 | . | 63 | . | 63 |
| 114 | OR Oakridge | . | . | . | 1 | . | . | . | . | . | 3 | . | 3 |
| 115 | OR Springfield-Eugene | . | . | . | 1 | . | . | . | . | . | 157 | . | 157 |
| 116 | OR-WA Portland-Vancouver | . | 1 | . | . | . | . | . | 948 | . | . | . | 948 |
| 117 | PA Altoona | 1 | . | . | . | . | . | 131 | . | . | . | . | 131 |
| 118 | PA Erie | 1 | . | . | . | . | . | 276 | . | . | . | . | 276 |
| 119 | PA Harrisburg-Lebanon-Carlisle | 1 | . | . | . | . | . | 588 | . | . | . | . | 588 |
| 120 | PA Johnstown | 1 | . | . | . | . | . | 241 | . | . | . | . | 241 |
| 121 | PA Lancaster | 1 | . | . | . | . | . | 423 | . | . | . | . | 423 |
| 122 | PA Pittsburgh-Beaver Valley | 1 | . | 2 | 1 | . | . | 2468 | . | 446 | 75 | . | 2468 |
| 123 | PA Scranton-Wilkes-Barre | 1 | . | . | . | . | . | 734 | . | . | . | . | 734 |
| 124 | PA Warren Co | . | . | 2 | . | . | . | . | . | 22 | . | . | 22 |
| 125 | PA York | 1 | . | . | . | . | . | 418 | . | . | . | . | 418 |
| 126 | PA-DE-NJ-MD Philadelphia-Wilmington-Trenton | 1 | . | . | . | . | . | . | 6010 | . | . | . | 6010 |
| 127 | PA-NJ Allentown-Bethlehem-Easton | 1 | . | 1 | . | . | . | 687 | . | 91 | . | . | 687 |
| 128 | PR Guaynabo Co. | . | . | . | 1 | . | . | . | . | 85 | . | . | 85 |
| 129 | RI Providence (all of RI) | 1 | . | . | . | . | . | 1003 | . | . | . | . | 1003 |
| 130 | TN Benton Co. | . | . | 1 | . | . | . | . | . | 14 | . | . | 14 |
| 131 | TN Humphreys Co. | . | . | 1 | . | . | . | . | . | 15 | . | . | 15 |
| 132 | TN Shelby Co. (Memphis) | . | . | . | . | 1(n) | . | . | . | . | 826 | 826 | . |
| 133 | TN Nashville | . | . | . | . | 1(o) | . | . | . | . | 81 | 81 | . |
| 134 | TN Polk Co. | . | . | 1 | . | . | . | . | . | 13 | . | . | 13 |
| 135 | TX Beaumont-Port Arthur | 1 | . | . | . | . | . | 361 | . | . | . | . | 361 |
| 136 | TX Dallas-Fort Worth | 1 | . | . | . | 1(p) | . | 3561 | . | . | 264 | 3561 | . |
| 137 | TX El Paso | 1 | 1 | . | 1 | . | . | 592 | 54 | . | 515 | . | 592 |
| 138 | TX Houston-Galveston-Brazoria | 1 | . | . | . | . | . | 3731 | . | . | . | . | 3731 |
| 139 | UT Ogden | . | 1 | . | 1 | . | . | . | 63 | . | 63 | . | 63 |
| 140 | UT Salt Lake City | . | . | 1 | 1 | . | . | . | . | 725 | 725 | . | 725 |
| 141 | UT Tooele Co. | . | . | 1 | . | . | . | . | . | 26 | . | . | 26 |
| 142 | UT Utah Co. (Provo) | . | 1 | . | 1 | . | . | . | 85 | . | 263 | . | 263 |
| 143 | VA Richmond | 1 | . | . | . | . | . | 738 | . | . | . | . | 738 |
| 144 | VA Smyth Co. (White Top Mtn.) | 1 | . | . | . | . | . | 0 | . | . | . | . | 0 |
| 145 | WA Olympia-Tumwater-Lacey | . | . | . | 1 | . | . | . | . | 63 | . | . | 63 |
| 146 | WA Seattle-Tacoma | . | . | . | 3 | . | . | . | . | 730 | . | . | 730 |
| 147 | WA Spokane | . | 1 | . | 1 | . | . | . | 279 | . | 177 | . | 279 |
| 148 | WA Wallula | . | . | . | 1 | . | . | . | . | . | 47 | . | 47 |
| 149 | WA Yakima | . | . | . | 1 | . | . | . | . | . | 54 | . | 54 |
| 150 | WI Door Co. | 1 | . | . | . | . | . | 26 | . | . | . | . | 26 |
| 151 | WI Manitowoc Co. | 1 | . | . | . | . | . | 80 | . | . | . | . | 80 |
| 152 | WI Marathon Co. (Wausau) | . | . | 1 | . | . | . | . | . | 115 | . | . | 115 |
| 153 | WI Milwaukee-Racine | 1 | . | . | . | . | . | 1735 | . | . | . | . | 1735 |
| 154 | WI Oneida Co. (Rhinelander) | . | . | 1 | . | . | . | . | . | 31 | . | . | 31 |
| 155 | WV Follansbee | . | . | . | 1 | . | . | . | . | . | 3 | . | 3 |
| 156 | WV New Manchester Gr. (in Hancock Co) | . | . | 1 | . | . | . | . | . | 10 | . | . | 10 |
| 157 | WV Wier.-Butler-Clay (in Hancock Co) | . | . | 1 | 1 | . | . | . | . | 25 | 22 | . | 25 |
| 158 | WY Sheridan | . | . | . | 1 | . | . | . | . | . | 13 | . | 13 |
| | Total | 59 | 29 | 38 | 79 | 10 | 1 | 101,739 | 43,118 | 4,760 | 29,939 | 1,375 | 119,424 |

Table A-13. Condensed Nonattainment Areas List(a) (continued)**Notes:**

- (a) This is a simplified listing of Classified Nonattainment areas. Unclassified and section 185a nonattainment areas are not included. In certain cases, footnotes are used to clarify the areas involved. For example, the lead nonattainment area listed within the Dallas-Fort Worth ozone nonattainment area is in Frisco, Texas, which is not in Dallas county, but is within the designated boundaries of the ozone nonattainment area. Readers interested in more detailed information should use the official Federal Register citation (40 CFR 81).
- (b) Names of nonattainment areas are listed alphabetically within each state. The largest city determines which state is listed first in the case of multiple-city nonattainment areas. When a larger nonattainment area, such as ozone, contains one or more smaller nonattainment areas, such as PM₁₀ or lead, the common name for the larger nonattainment area is used. Note that several smaller nonattainment areas may be inside one larger nonattainment area, as is the case in Figure 1. For the purpose of this table, these are considered one nonattainment area and are listed on one line. Occasionally, two nonattainment areas may only partially overlap, as in Figure 2. These are counted as two distinct nonattainment areas and are listed on separate lines.
- (c) The number of nonattainment areas for each of the criteria pollutants is listed.
- (d) Population figures (in 1000s) were obtained from 1990 census data. For nonattainment areas defined as only partial counties, population figures for just the nonattainment area were used when these were available. Otherwise, whole county population figures were used. When a larger nonattainment area encompasses a smaller one, double-counting the population in the "All" column is avoided by only counting the population of the larger nonattainment area.
- (e) NO₂ population same as O₃ and CO.
- (f) Carbon monoxide nonattainment area includes San Francisco county, and parts of Alameda, Contra Costa, Marin, Napa, San Mateo Santa Clara, Solano, Sonoma counties.
- (g) Lead nonattainment area is a portion of Franklin township, Marion county, Indiana.
- (h) Sulfur dioxide nonattainment area is a portion of Boyd county.
- (i) PM₁₀ nonattainment area is Granite City, Illinois, in Madison county.
- (j) Lead nonattainment area is Herculaneum, Missouri in Jefferson county.
- (k) Lead nonattainment area is a portion of Lewis and Clark county, Montana.
- (l) Ozone nonattainment area is a portion of Dona Ana county, New Mexico.
- (m) Youngstown has been redesignated for ozone but not the rest of the MSA and the population has been adjusted accordingly.
- (n) Lead nonattainment area is a portion of Shelby county, Tennessee.
- (o) Lead nonattainment area is a portion of Williamson county, Tennessee.
- (p) Lead nonattainment area is Frisco, Texas, in Collin county.

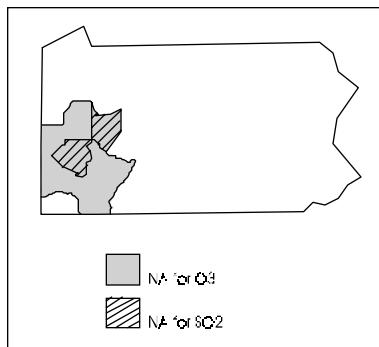


Figure A-1. (Multiple NA areas within a larger NA area)
Two SO₂ areas inside the Pittsburgh-Beaver Valley ozone NA. Counted as one NA area.

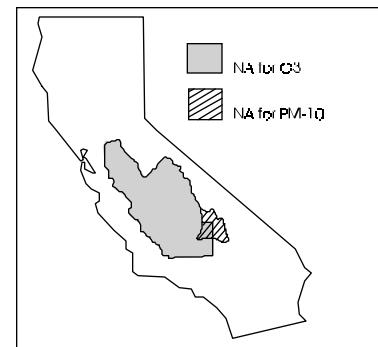


Figure A-2. (Overlapping NA areas) Searles Valley PM₁₀ NA partially overlaps the San Joaquin Valley ozone NA. Counted as two NA areas.

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb OMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|--------------------------------------|-----------------|---------------|---------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| ABILENE, TX | 119,655 | ND | ND | ND | ND | ND | ND | ND | ND |
| AGUADILLA, PR | 128,172 | ND | ND | ND | ND | ND | ND | ND | ND |
| AKRON, OH | 657,575 | 3 | 0.04 | ND | 0.11 | 25 | 73 | 0.010 | 0.042 |
| ALBANY, GA | 112,561 | ND | ND | ND | ND | IN | 21 | ND | ND |
| ALBANY-SCHENECTADY-TROY, NY | 861,424 | 4 | 0.03 | 0.015 | 0.11 | 21 | 48 | 0.005 | 0.025 |
| ALBUQUERQUE, NM | 589,131 | 7 | ND | 0.022 | 0.10 | 38 | 94 | ND | ND |
| ALEXANDRIA, LA | 131,556 | ND | ND | ND | ND | 19 | 42 | ND | ND |
| ALLENTOWN-BETHLEHEM-EASTON, PA | 595,081 | 3 | 0.08 | 0.024 | 0.11 | IN | 65 | 0.010 | 0.035 |
| ALTOONA, PA | 130,542 | 2 | ND | 0.013 | 0.10 | 22 | 60 | 0.008 | 0.033 |
| AMARILLO, TX | 187,547 | ND | ND | ND | ND | IN | 38 | ND | ND |
| ANCHORAGE, AK | 226,338 | 11 | ND | ND | ND | 34 | 133 | ND | ND |
| ANN ARBOR, MI | 490,058 | ND | ND | ND | 0.10 | ND | ND | ND | ND |
| ANNISTON, AL | 116,034 | ND | ND | ND | ND | IN | 31 | ND | ND |
| APPLETON-OSHKOSH-NEENAH, WI | 315,121 | ND | ND | ND | 0.09 | ND | ND | ND | ND |
| ARECIBO, PR | 155,005 | ND | ND | ND | ND | ND | ND | ND | ND |
| ASHEVILLE, NC | 191,774 | ND | ND | ND | 0.08 | 25 | 76 | ND | ND |
| ATHENS, GA | 126,262 | ND | ND | ND | ND | ND | ND | ND | ND |
| ATLANTA, GA | 2,959,950 | 4 | 0.03 | 0.027 | 0.14 | 31 | 60 | 0.005 | 0.022 |
| ATLANTIC-CAPE MAY, NJ | 319,416 | 4 | 0.01 | ND | 0.11 | IN | 40 | 0.003 | 0.014 |
| AUGUSTA-AIKEN, GA-SC | 415,184 | ND | 0.00 | ND | 0.11 | 19 | 44 | ND | ND |
| AURORA-ELGIN, IL | 356,884 | ND | ND | ND | ND | ND | ND | ND | ND |
| AUSTIN-SAN MARCOS, TX | 846,227 | 3 | ND | 0.018 | 0.10 | 20 | 32 | ND | ND |
| BAKERSFIELD, CA | 543,477 | 6 | 0.00 | 0.029 | 0.16 | 54 | 110 | 0.003 | 0.009 |
| BALTIMOREvMD | 2,3821,72 | 4 | 0.03 | 0.027 | 0.13 | 29 | 75 | 0.008 | 0.028 |
| BANGOR, ME | 91,629 | ND | ND | ND | 0.08 | 19 | 34 | ND | ND |
| BARNSTABLE-YARMOUTH, MA | 134,954 | ND | ND | ND | ND | ND | ND | ND | ND |
| BATON ROUGE, LA | 528,264 | 5 | 0.15 | 0.021 | 0.12 | 26 | 51 | 0.006 | 0.024 |
| BEAUMONT-PORT ARTHUR, TX | 361,226 | 2 | 0.02 | 0.011 | 0.12 | 15 | 34 | 0.006 | 0.044 |
| BELLINGHAM, WA | 127,780 | ND | ND | ND | 0.08 | 15 | 37 | 0.005 | 0.013 |
| BENTON HARBOR, MI | 161,378 | ND | ND | ND | 0.13 | ND | ND | ND | ND |
| BERGEN-PASSAIC, NJ | 1,278,440 | 4 | 0.00 | 0.028 | 0.11 | 37 | 61 | 0.007 | 0.026 |
| BILLINGS, MT | 113,419 | 7 | ND | ND | ND | 28 | 75 | 0.014 | 0.099 |
| BILOXI-GULFPORT-PASCAGOULA, MS | 312,368 | ND | ND | ND | 0.10 | 18 | 33 | 0.003 | 0.043 |
| BINGHAMTON, NY | 264,497 | ND | ND | ND | ND | IN | 34 | ND | ND |
| BIRMINGHAM, AL | 840,140 | 6 | 0.13 | 0.010 | 0.14 | 34 | 100 | 0.004 | 0.015 |
| BISMARCK, ND | 83,831 | ND | ND | ND | ND | 12 | 27 | 0.007 | 0.056 |
| BLOOMINGTON, IN | 108,978 | ND | ND | ND | ND | ND | ND | ND | ND |
| BLOOMINGTON-NORMAL, IL | 129,180 | ND | ND | ND | ND | ND | ND | ND | ND |
| BOISE CITY, ID | 295,851 | 5 | ND | IN | ND | 36 | 90 | ND | ND |
| BOSTON, MA-NH | 3,227,707 | 5 | ND | 0.031 | 0.11 | 27 | 80 | 0.008 | 0.037 |
| BOULDER-LONGMONT, CO | 225,339 | 6 | ND | ND | 0.09 | 19 | 59 | ND | ND |
| BRAZORIA, TX | 191,707 | ND | ND | ND | 0.11 | ND | ND | ND | ND |
| BREMERTON, WA | 189,731 | 4 | ND | ND | ND | 14 | 41 | ND | ND |
| BRIDGEPORT, CT | 443,722 | 3 | 0.02 | 0.024 | 0.13 | 27 | 63 | 0.006 | 0.023 |
| BROCKTON, MA | 236,409 | ND | ND | 0.008 | 0.10 | ND | ND | ND | ND |
| BROWNSVILLE-HARLINGEN-SAN BENITO, TX | 260,120 | 2 | 0.02 | ND | 0.08 | 21 | 40 | 0.001 | 0.004 |
| BRYAN-COLLEGE STATION, TX | 121,862 | ND | ND | ND | ND | ND | ND | ND | ND |
| BUFFALO-NIAGARA FALLS, NY | 1,189,288 | 4 | 0.03 | 0.022 | 0.10 | 22 | 78 | 0.008 | 0.048 |
| BURLINGTON, VT | 151,506 | 3 | ND | 0.017 | ND | 20 | 37 | 0.002 | 0.014 |
| CAGUAS, PR | 279,501 | ND | ND | ND | ND | ND | ND | ND | ND |
| CANTON-MASSILLON, OH | 394,106 | 3 | ND | ND | 0.10 | 28 | 68 | 0.006 | 0.032 |
| CASPER, WY | 61226 | ND | ND | ND | ND | 19 | 36 | ND | ND |

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996 (continued)

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|-------------------------------------|-----------------|---------------|---------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| CEDAR RAPIDS, IA | 168,767 | 8 | ND | ND | 0.07 | 26 | 65 | 0.011 | 0.200(*) |
| CHAMPAIGN-URBANA, IL | 173,025 | ND | ND | ND | 0.09 | 19 | 39 | 0.003 | 0.013 |
| CHARLESTON-NORTH CHARLESTON, SC | 506,875 | 5 | 0.02 | 0.010 | 0.10 | 22 | 54 | 0.003 | 0.021 |
| CHARLESTON, WV | 250,454 | 2 | 0.02 | 0.020 | 0.10 | 25 | 50 | 0.010 | 0.039 |
| CHARLOTTE-GASTONIA-ROCK HILL, NC-SC | 1,162,093 | 5 | 0.01 | 0.016 | 0.13 | 28 | 53 | 0.005 | 0.015 |
| CHARLOTTESVILLE, VA | 131,107 | ND | ND | ND | ND | 21 | 39 | ND | ND |
| CHATTANOOGA, TN-GA | 424,347 | ND | ND | ND | 0.11 | 33 | 65 | ND | ND |
| CHEYENNE, WY | 73,142 | ND | ND | ND | ND | 15 | 31 | ND | ND |
| CHICAGO, IL | 7,410,858 | 5 | 0.54(a) | 0.032 | 0.13 | 40 | 122 | 0.008 | 0.032 |
| CHICO-PARADISE, CA | 182,120 | 5 | 0.00 | 0.013 | 0.10 | 25 | 62 | ND | ND |
| CINCINNATI-OH-KY-IN | 1,526,092 | 3 | 0.22 | 0.029 | 0.12 | 32 | 72 | 0.011 | 0.045 |
| CLARKSVILLE-HOPKINSVILLE, TN-KY | 169,439 | ND | ND | ND | 0.10 | 26 | 56 | 0.006 | 0.023 |
| CLEVELAND-LORAIN-ELYRIA, OH | 2,202,069 | 9 | 1.06(b) | 0.026 | 0.12 | 41 | 123 | 0.011 | 0.049 |
| COLORADO SPRINGS, CO | 397,014 | 5 | 0.01 | ND | 0.08 | 26 | 76 | ND | ND |
| COLUMBIA, MO | 112,379 | ND | ND | ND | ND | ND | ND | ND | ND |
| COLUMBIA, SC | 453,331 | 3 | 0.02 | 0.013 | 0.10 | 42 | 117 | 0.004 | 0.020 |
| COLUMBUS, GA-AL | 260,860 | ND | 0.65(c) | ND | 0.10 | 22 | 58 | ND | ND |
| COLUMBUS, OH | 1,345,450 | 3 | 0.07 | ND | 0.11 | 28 | 66 | 0.004 | 0.021 |
| CORPUS CHRISTI, TX | 349,894 | ND | ND | ND | 0.10 | 25 | 45 | 0.003 | 0.015 |
| CUMBERLAND, MD-WV | 101,643 | ND | ND | ND | ND | 27 | 47 | 0.003 | 0.019 |
| DALLAS, TX | 2,676,248 | 6 | 0.70(d) | 0.019 | 0.14 | 51 | 102 | 0.005 | 0.046 |
| DANBURY, CT | 193,597 | ND | ND | ND | 0.11 | IN | 45 | 0.005 | 0.020 |
| DANVILLE, VA | 108,711 | ND | ND | ND | ND | ND | ND | ND | ND |
| DAVENPORT-MOLINE-ROCK ISLAND, IA-IL | 350,861 | ND | 0.02 | ND | 0.09 | 43 | 153 | 0.004 | 0.024 |
| DAYTON-SPRINGFIELD, OH | 951,270 | 3 | 0.05 | ND | 0.12 | 25 | 66 | 0.005 | 0.031 |
| DAYTONA BEACH, FL | 399,413 | ND | ND | ND | 0.09 | 21 | 63 | ND | ND |
| DECATUR, AL | 131,556 | ND | ND | ND | 0.11 | 21 | 45 | IN | 0.001 |
| DECATUR, IL | 117,206 | ND | 0.02 | ND | 0.10 | 28 | 53 | 0.005 | 0.022 |
| DENVER, CO | 1,622,980 | 7 | 0.05 | 0.033 | 0.11 | 34 | 96 | 0.006 | 0.024 |
| DES MOINES, IA | 392,928 | 4 | ND | ND | 0.08 | IN | 130 | ND | ND |
| DETROIT, MI | 4,266,654 | 6 | 0.04 | 0.021 | 0.11 | 40 | 106 | 0.011 | 0.079 |
| DOOTHAN, AL | 130,964 | ND | ND | ND | ND | IN | 54 | ND | ND |
| DOVER, DE | 110,993 | ND | ND | ND | 0.11 | ND | ND | ND | ND |
| DUBUQUE, IA | 86,403 | ND | ND | ND | ND | ND | ND | 0.003 | 0.022 |
| DULUTH-SUPERIOR, MN-WI | 239,971 | 5 | ND | ND | 0.07 | 21 | 58 | ND | ND |
| DUTCHESS COUNTY, NY | 259,462 | ND | ND | ND | 0.11 | ND | ND | ND | ND |
| EAU CLAIRE, WI | 137,543 | ND | ND | ND | ND | ND | ND | ND | ND |
| EL PASO, TX | 591,610 | 10 | 0.40 | 0.035 | 0.12 | 45 | 158 | 0.009 | 0.046 |
| ELKHART-GOSHEN, IN | 156,198 | ND | ND | ND | 0.12 | ND | ND | ND | ND |
| ELMIRA, NY | 95,195 | ND | ND | ND | 0.09 | IN | 24 | 0.004 | 0.016 |
| ENID, OK | 56,735 | ND | ND | 0.009 | ND | ND | ND | ND | ND |
| ERIE, PA | 275,572 | ND | ND | 0.015 | 0.10 | IN | 56 | 0.011 | 0.066 |
| EUGENE-SPRINGFIELD, OR | 282,912 | 6 | 0.02 | ND | 0.11 | 19 | 78 | ND | ND |
| EVANSVILLE-HENDERSON, IN-KY | 278,990 | 4 | ND | 0.017 | 0.12 | 26 | 59 | 0.018 | 0.097 |
| FARGO-MOORHEAD, ND-MN | 153,296 | ND | ND | 0.008 | 0.08 | 17 | 54 | 0.002 | 0.008 |
| FAYETTEVILLE, NC | 274,566 | 4 | ND | ND | 0.11 | 26 | 53 | 0.004 | 0.012 |
| FAYETTEVILLE-SPRINGDALE-ROGERS, AR | 259,462 | ND | ND | ND | ND | 23 | 48 | ND | ND |
| FITCHBURG-LEOMINSTER, MA | 138,165 | ND | ND | ND | ND | ND | ND | ND | ND |
| FLAGSTAFF, AZ-UT | 101,760 | ND | ND | ND | 0.08 | IN | 31 | ND | ND |
| FLINT, MI | 430,459 | ND | 0.01 | ND | 0.11 | 20 | 45 | 0.002 | 0.012 |
| FLORENCE, AL | 131,327 | ND | ND | ND | ND | 18 | 46 | 0.003 | 0.019 |
| FLORENCE, SC | 114,344 | ND | 0.01 | ND | ND | ND | ND | ND | ND |

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996 (continued)

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb OMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|---|-----------------|---------------|---------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| FORT COLLINS-LOVELAND, CO | 186,136 | 5 | ND | ND | 0.09 | IN | 52 | ND | ND |
| FORT LAUDERDALE, FL | 1,255,488 | 4 | 0.05 | 0.010 | 0.10 | 20 | 48 | 0.002 | 0.008 |
| FORT MYERS-CAPE CORAL, FL | 335,113 | ND | ND | ND | 0.08 | 17 | 38 | ND | ND |
| FORT PIERCE-PORT ST. LUCIE, FL | 251,071 | ND | ND | ND | 0.07 | IN | 42 | ND | ND |
| FORT SMITH, AR-OK | 175,911 | ND | ND | ND | ND | 25 | 47 | ND | ND |
| FORT WALTON BEACH, FL | 143,776 | ND | ND | ND | ND | ND | ND | ND | ND |
| FORT WAYNE, IN | 456,281 | 3 | 0.02 | 0.007 | 0.11 | 35 | 80 | 0.003 | 0.010 |
| FORT WORTH-ARLINGTON, TX | 1,361,034 | 3 | 0.02 | 0.021 | 0.13 | 24 | 56 | 0.001 | 0.011 |
| FRESNO, CA | 755,580 | 7 | 0.00 | 0.021 | 0.15 | 39 | 101 | 0.002 | 0.008 |
| GADSDEN, AL | 99,840 | ND | 0.26 | ND | ND | 23 | 50 | ND | ND |
| GAINESVILLE, FL | 181,596 | ND | ND | ND | ND | 19 | 44 | ND | ND |
| GALVESTON-TEXAS CITY, TX | 217,399 | ND | 0.02 | IN | 0.11 | 22 | 52 | 0.014 | 0.067 |
| GARY, IN | 604,526 | 4 | 0.21(e) | 0.021 | 0.13 | 28 | 208 | 0.007 | 0.031 |
| GLENS FALLS, NY | 118,539 | ND | ND | ND | ND | IN | 40 | 0.002 | 0.013 |
| GOLDSBORO, NC | 104,666 | ND | ND | ND | ND | 23 | 43 | ND | ND |
| GRAND FORKS, ND-MN | 103,181 | ND | ND | ND | ND | IN | 53 | ND | ND |
| GRAND JUNCTION, CO | 93,145 | 6 | ND | ND | ND | 21 | 63 | ND | ND |
| GRAND RAPIDS-MUSKEGON-HOLLAND, MI | 937,891 | 3 | 0.01 | 0.009 | 0.13 | 22 | 71 | 0.002 | 0.011 |
| GREAT FALLS, MT | 77,691 | 5 | ND | ND | ND | 19 | 59 | 0.004 | 0.020 |
| GREELEY, CO | 131,821 | 7 | ND | ND | 0.10 | 18 | 56 | ND | ND |
| GREEN BAY, WI | 194,594 | ND | ND | ND | 0.11 | ND | ND | 0.003 | 0.011 |
| GREENSBORO—WINSTON-SALEM—HIGH POINT, NC | 1,050,304 | 4 | ND | 0.016 | 0.12 | 28 | 58 | 0.007 | 0.026 |
| GREENVILLE, NC | 107,924 | ND | ND | ND | 0.10 | 20 | 36 | ND | ND |
| GREENVILLE-SPARTANBURG-ANDERSON, SC | 830,563 | 5 | 0.01 | 0.016 | 0.11 | 39 | 77 | 0.002 | 0.012 |
| HAGERSTOWN, MD | 121,393 | ND | ND | ND | ND | ND | ND | ND | ND |
| HAMILTON-MIDDLETOWN, OH | 291,479 | ND | 0.05 | ND | 0.12 | 32 | 78 | 0.007 | 0.026 |
| HARRISBURG-LEBANON-CARLISLE, PA | 587,986 | 2 | 0.04 | 0.021 | 0.10 | 23 | 63 | 0.006 | 0.022 |
| HARTFORD, CT | 1,157,585 | 5 | 0.03 | 0.016 | 0.10 | 21 | 49 | 0.006 | 0.022 |
| HATTIESBURG, MS | 98,738 | ND | ND | ND | ND | ND | ND | ND | ND |
| HICKORY-MORGANTON-LENOIR, NC | 292,409 | ND | ND | ND | 0.09 | 24 | 60 | 0.004 | 0.012 |
| HONOLULU, HI | 836,231 | 3 | 0.03 | 0.003 | 0.05 | 19 | 29 | 0.002 | 0.009 |
| HOUMA, LA | 182,842 | ND | ND | ND | 0.09 | ND | ND | ND | ND |
| HOUSTON, TX | 3,322,025 | 7 | 0.02 | 0.023 | 0.18 | 40 | 68 | 0.006 | 0.046 |
| HUNTINGTON-ASHLAND, WV-KY-OH | 312,529 | 4 | 0.05 | 0.013 | 0.12 | 37 | 86 | 0.012 | 0.057 |
| HUNTSVILLE, AL | 293,047 | 3 | ND | ND | 0.10 | 22 | 54 | ND | ND |
| INDIANAPOLIS, IN | 1,380,491 | 3 | 0.16(f) | 0.018 | 0.12 | 29 | 71 | 0.006 | 0.041 |
| IOWA CITY, IA | 96,119 | ND | ND | ND | ND | ND | ND | ND | ND |
| JACKSON, MI | 149,756 | ND | ND | ND | ND | ND | ND | ND | ND |
| JACKSON, MS | 395,396 | 5 | ND | ND | 0.10 | 22 | 55 | 0.002 | 0.008 |
| JACKSON, TN | 90,801 | ND | 0.02 | ND | ND | 22 | 45 | ND | ND |
| JACKSONVILLE, FL | 906,727 | 4 | 0.02 | 0.015 | 0.10 | 26 | 61 | 0.006 | 0.030 |
| JACKSONVILLE, NC | 149,838 | ND | ND | ND | ND | 22 | 37 | ND | ND |
| JAMESTOWN, NY | 141,895 | ND | ND | ND | 0.10 | 15 | 33 | 0.008 | 0.039 |
| JANESVILLE-BELOIT, WI | 139,510 | ND | ND | ND | 0.10 | ND | ND | ND | ND |
| JERSEY CITY, NJ | 553,099 | 7 | 0.03 | 0.027 | 0.12 | 43 | 83 | 0.009 | 0.030 |
| JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA | 436,047 | 3 | 0.13 | 0.018 | 0.10 | 28 | 67 | 0.012 | 0.052 |
| JOHNSTOWN, PA | 241,247 | 5 | 0.05 | 0.018 | 0.10 | IN | 63 | 0.011 | 0.034 |
| JONESBORO, AR | 68,956 | ND | ND | ND | ND | 26 | 53 | ND | ND |
| JOPLIN, MO | 134,910 | ND | ND | ND | ND | ND | ND | ND | ND |
| KALAMAZOO-BATTLE CREEK, MI | 429,453 | 2 | 0.01 | 0.011 | 0.10 | 22 | 57 | 0.003 | 0.011 |
| KANKAKEE, IL | 96,255 | ND | ND | ND | ND | ND | ND | ND | ND |
| KANSAS CITY, MO-KS | 1,582,875 | 4 | 0.07 | 0.022 | 0.11 | 45 | 120 | 0.006 | 0.057 |

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996 (continued)

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|-----------------------------------|-----------------|---------------|----------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| KENOSHA, WI | 128,181 | ND | ND | ND | 0.14 | ND | ND | ND | ND |
| KILLEEN-TEMPLE, TX | 255,301 | ND | ND | ND | ND | IN | 41 | ND | ND |
| KNOXVILLE, TN | 585,960 | 3 | ND | 0.014 | 0.11 | 36 | 78 | 0.009 | 0.058 |
| KOKOMO, IN | 96,946 | ND | ND | ND | ND | ND | ND | ND | ND |
| LA CROSSE, WI-MN | 116,401 | ND | ND | ND | ND | ND | ND | ND | ND |
| LAFAYETTE, LA | 344,853 | ND | ND | ND | 0.10 | 16 | 25 | ND | ND |
| LAFAYETTE, IN | 161,572 | 1 | ND | IN | ND | IN | 34 | IN | 0.020 |
| LAKE CHARLES, LA | 168,134 | ND | ND | 0.006 | 0.10 | IN | 33 | 0.003 | 0.018 |
| LAKELAND-WINTER HAVEN, FL | 405,382 | ND | ND | ND | 0.09 | 22 | 45 | 0.006 | 0.021 |
| LANCASTER, PA | 422,822 | 3 | 0.04 | 0.017 | 0.10 | 31 | 69 | 0.005 | 0.021 |
| LANSING-EAST LANSING, MI | 432,674 | ND | ND | ND | 0.10 | ND | ND | ND | ND |
| LAREDO, TX | 133,239 | 6 | ND | ND | 0.07 | 42 | 103 | ND | ND |
| LAS CRUCES, NM | 135,510 | 4 | 0.07 | 0.009 | 0.12 | 56 | 143 | 0.006 | 0.056 |
| LAS VEGAS, NV-AZ | 852,737 | 10 | ND | 0.027 | 0.10 | IN | 328 | ND | ND |
| LAWRENCE, KS | 81,798 | ND | ND | ND | ND | ND | ND | ND | ND |
| LAWRENCE, MA-NH | 353,232 | ND | ND | ND | 0.09 | IN | 34 | 0.005 | 0.023 |
| LAWTON, OK | 111,486 | 2 | ND | IN | 0.08 | IN | 56 | ND | ND |
| LEWISTON-AUBURN, ME | 93,679 | ND | ND | ND | ND | 20 | 37 | 0.004 | 0.018 |
| LEXINGTON, KY | 405,936 | 3 | 0.04 | 0.014 | 0.10 | 26 | 60 | 0.006 | 0.020 |
| LIMA, OH | 154,340 | ND | ND | ND | 0.11 | IN | 44 | 0.003 | 0.015 |
| LINCOLN, NE | 213,641 | 5 | ND | ND | 0.06 | 28 | 63 | ND | ND |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | 513,117 | 4 | ND | 0.011 | 0.10 | 29 | 52 | 0.002 | 0.009 |
| LONGVIEW-MARSHALL, TX | 193,801 | ND | ND | ND | 0.11 | ND | ND | ND | ND |
| LOS ANGELES-LONG BEACH, CA | 8,863,164 | 15 | 0.06 | 0.045 | 0.20 | 45 | 109 | 0.004 | 0.011 |
| LOUISVILLE, KY-IN | 948,829 | 6 | 0.02 | 0.020 | 0.12 | 28 | 61 | 0.009 | 0.038 |
| LOWELL, MA-NH | 280,578 | 5 | ND | ND | ND | ND | ND | ND | ND |
| LUBBOCK, TX | 222,636 | ND | ND | ND | ND | 22 | 85 | ND | ND |
| LYNCHBURG, VA | 193,928 | ND | ND | ND | ND | 23 | 41 | ND | ND |
| MACON, GA | 290,909 | ND | ND | ND | ND | IN | 34 | ND | ND |
| MADISON, WI | 367,085 | 4 | ND | ND | 0.09 | 21 | 44 | 0.002 | 0.010 |
| MANCHESTER, NH | 50,000 | ND | ND | ND | ND | ND | ND | ND | ND |
| MANSFIELD, OH | 174,007 | ND | ND | ND | ND | 24 | 68 | ND | ND |
| MAYAGUEZ, PR | 237,143 | ND | ND | ND | ND | ND | ND | ND | ND |
| MCALLEN-EDINBURG-MISSION, TX | 383,545 | ND | ND | ND | 0.06 | 28 | 111 | ND | ND |
| MEDFORD-ASHLAND, OR | 146,389 | 7 | 0.02 | ND | 0.10 | 29 | 82 | ND | ND |
| MELBOURNE-TITUSVILLE-PALM BAY, FL | 398,978 | ND | ND | ND | 0.09 | 18 | 44 | ND | ND |
| MEMPHIS, TN-AR-MS | 1,007,306 | 7 | 2.81(g) | 0.024 | 0.15 | 29 | 60 | 0.004 | 0.017 |
| MERCED, CA | 178,403 | ND | ND | 0.012 | 0.12 | IN | 57 | ND | ND |
| MIAMI, FL | 1,937,094 | 5 | 0.01 | 0.016 | 0.10 | 28 | 62 | 0.002 | 0.005 |
| MIDDLESEX-SOMERSET-HUNTERDON, NJ | 1,019,835 | 3 | 0.06 | 0.020 | 0.13 | IN | 46 | 0.005 | 0.024 |
| MILWAUKEE-WAUKESHA, WI | 1,432,149 | 3 | 0.03 | 0.021 | 0.12 | 28 | 69 | 0.004 | 0.028 |
| MINNEAPOLIS-ST. PAUL, MN-WI | 2,538,834 | 7 | 0.55(h) | 0.027 | 0.09 | 30 | 91 | 0.004 | 0.041 |
| MOBILE, AL | 476,923 | ND | ND | ND | 0.10 | 28 | 91 | 0.009 | 0.070 |
| MODESTO, CA | 370,522 | 6 | 0.00 | 0.022 | 0.13 | 32 | 83 | ND | ND |
| MONMOUTH-OCEAN, NJ | 986,327 | 5 | ND | ND | 0.12 | ND | ND | ND | ND |
| MONROE, LA | 142,191 | ND | ND | ND | 0.09 | IN | 76 | 0.003 | 0.007 |
| MONTGOMERY, AL | 292,517 | 2 | ND | 0.010 | 0.10 | 23 | 39 | 0.003 | 0.022 |
| MUNCIE, IN | 119,659 | ND | 0.94(i) | ND | ND | ND | ND | ND | ND |
| MYRTLE BEACH, SC | 144,053 | ND | ND | ND | ND | ND | ND | ND | ND |
| NAPLES, FL | 152,099 | ND | ND | ND | ND | 16 | 45 | ND | ND |
| NASHUA, NH | 168,233 | 8 | ND | 0.019 | 0.10 | 17 | 44 | 0.007 | 0.026 |
| NASHVILLE, TN | 985,026 | 5 | 0.90(j) | 0.012 | 0.12 | 32 | 66 | 0.007 | 0.076 |

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996 (continued)

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb OMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|--------------------------------------|-----------------|---------------|----------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| NASSAU-SUFFOLK, NY | 2,609,212 | 5 | ND | 0.026 | 0.12 | 21 | 55 | 0.008 | 0.031 |
| NEW BEDFORD, MA | 175,641 | ND | ND | ND | 0.12 | 16 | 44 | ND | ND |
| NEW HAVEN-MERIDEN, CT | 530,180 | 3 | 0.05 | 0.026 | 0.12 | 28 | 109 | 0.008 | 0.031 |
| NEW LONDON-NORWICH, CT-RI | 290,734 | ND | ND | ND | 0.12 | 19 | 56 | 0.005 | 0.016 |
| NEW ORLEANS, LA | 1,285,270 | 4 | 0.09 | 0.018 | 0.11 | 31 | 64 | 0.006 | 0.035 |
| NEW YORK, NY | 8,546,846 | 6 | 0.16 | 0.042 | 0.12 | 41 | 87 | 0.015 | 0.055 |
| NEWARK, NJ | 1,915,928 | 6 | 0.07 | 0.041 | 0.12 | 34 | 67 | 0.007 | 0.030 |
| NEWBURGH, NY-PA | 335,613 | ND | 0.06 | ND | 0.12 | ND | ND | ND | ND |
| NORFOLK-VIRGINIA BEACH-NEWPORT, VA | 1,443,244 | 6 | 0.03 | 0.018 | 0.10 | 21 | 50 | 0.007 | 0.025 |
| OAKLAND, CA | 2,082,914 | 4 | 0.02 | 0.022 | 0.14 | 23 | 45 | 0.003 | 0.011 |
| OCALA, FL | 194,833 | ND | ND | ND | ND | ND | ND | ND | ND |
| ODESSA-MIDLAND, TX | 255,545 | ND | ND | ND | ND | 26 | 59 | ND | ND |
| OKLAHOMA CITY, OK | 958,839 | 8 | 0.01 | 0.014 | 0.10 | 28 | 56 | IN | 0.005 |
| OLYMPIA, WA | 161,238 | 4 | ND | ND | ND | IN | 53 | ND | ND |
| OMAHA, NE-IA | 639,580 | 7 | 5.06(k) | ND | 0.07 | 42 | 145 | 0.004 | 0.051 |
| ORANGE COUNTY, CA | 2,410,556 | 7 | ND | 0.035 | 0.14 | 35 | 77 | 0.001 | 0.004 |
| ORLANDO, FL | 1,224,852 | 4 | 0.00 | 0.013 | 0.10 | 25 | 67 | 0.002 | 0.008 |
| OWENSBORO, KY | 87,189 | 3 | ND | 0.011 | 0.11 | 23 | 59 | 0.007 | 0.020 |
| PANAMA CITY, FL | 126,994 | ND | ND | ND | ND | 22 | 50 | ND | ND |
| PARKERSBURG-MARIETTA, WV-OH | 149,169 | ND | 0.02 | ND | 0.11 | 23 | 78 | 0.010 | 0.046 |
| PENSACOLA, FL | 344,406 | ND | ND | ND | 0.10 | 21 | 37 | 0.005 | 0.033 |
| PEORIA-PEKIN, IL | 339,172 | 5 | 0.02 | ND | 0.09 | 24 | 44 | 0.008 | 0.047 |
| PHILADELPHIA, PA-NJ | 4,922,175 | 6 | 9.23(l) | 0.034 | 0.13 | 70 | 356 | 0.010 | 0.063 |
| PHOENIX-MESA, AZ | 2,238,480 | 10 | 0.05 | 0.032 | 0.12 | IN | 130 | 0.003 | 0.020 |
| PINE BLUFF, AR | 85,487 | ND | ND | ND | ND | 23 | 51 | ND | ND |
| PITTSBURGH, PA | 2,384,811 | 4 | 0.07 | 0.030 | 0.11 | 41 | 123 | 0.015 | 0.070 |
| PITTSFIELD, MA | 88,695 | ND | ND | ND | 0.11 | ND | ND | ND | ND |
| POCATELLO, ID | 66,026 | ND | ND | 0.014 | ND | 31 | 89 | 0.006 | 0.030 |
| PONCE, PR | 3,442,660 | ND | ND | ND | ND | IN | 53 | ND | ND |
| PORTLAND, ME | 221,095 | ND | ND | ND | 0.10 | 27 | 61 | 0.005 | 0.021 |
| PORTLAND-VANCOUVER, OR-WA | 1,515,452 | 7 | 0.11 | IN | 0.13 | 27 | 70 | ND | ND |
| PORTSMOUTH-ROCHESTER, NH-ME | 223,271 | ND | ND | 0.013 | 0.11 | 18 | 42 | 0.004 | 0.015 |
| PROVIDENCE-FALL RIVER-WARWICK, RI-MA | 1,134,350 | 4 | ND | 0.025 | 0.11 | 38 | 83 | 0.009 | 0.043 |
| PROVO-OREM, UT | 263,590 | 9 | ND | 0.024 | 0.11 | 37 | 141 | ND | ND |
| PUEBLO, CO | 123,051 | ND | ND | ND | ND | IN | 49 | ND | ND |
| PUNTA GORDA, FL | 110,975 | ND | ND | ND | ND | ND | ND | ND | ND |
| RACINE, WI | 175,034 | 3 | ND | ND | 0.13 | ND | ND | ND | ND |
| RALEIGH-DURHAM-CHAPEL HILL, NC | 855,545 | 6 | ND | ND | 0.11 | 26 | 49 | 0.003 | 0.010 |
| RAPID CITY, SD | 81,343 | ND | ND | ND | ND | 37 | 137 | ND | ND |
| READING, PA | 336,523 | 3 | 0.82(m) | 0.022 | 0.11 | 30 | 66 | 0.010 | 0.037 |
| REDDING, CA | 147,036 | ND | ND | ND | 0.11 | IN | 50 | ND | ND |
| RENO, NV | 254,667 | 8 | ND | ND | 0.10 | 45 | 131 | ND | ND |
| RICHLAND-KENNEWICK-PASCO, WA | 150,033 | ND | ND | ND | ND | IN | 82 | ND | ND |
| RICHMOND-PETERSBURG, VA | 865,640 | 3 | 0.01 | 0.022 | 0.11 | 26 | 69 | 0.006 | 0.027 |
| RIVERSIDE-SAN BERNARDINO, CA | 2,588,793 | 7 | 0.04 | 0.038 | 0.22 | 63 | 155 | 0.002 | 0.005 |
| ROANOKE, VA | 224,477 | 6 | ND | 0.013 | 0.08 | IN | 78 | 0.003 | 0.014 |
| ROCHESTER, MN | 106,470 | ND | ND | ND | ND | 19 | 44 | 0.002 | 0.016 |
| ROCHESTER, NY | 1,062,470 | 4 | 0.04 | ND | 0.09 | 25 | 54 | 0.010 | 0.041 |
| ROCKFORD, IL | 329,676 | 3 | 0.05 | ND | 0.09 | 18 | 36 | ND | ND |
| ROCKY MOUNT, NC | 133,235 | ND | ND | ND | 0.09 | 23 | 39 | 0.003 | 0.010 |
| SACRAMENTO, CA | 1,340,010 | 7 | 0.01 | 0.022 | 0.14 | 27 | 80 | 0.002 | 0.005 |
| SAGINAW-BAY CITY-MIDLAND, MI | 399,320 | ND | ND | ND | ND | ND | ND | ND | ND |

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996 (continued)

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|---|-----------------|---------------|----------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| ST. CLOUD, MN | 190,921 | 4 | ND | ND | ND | ND | ND | ND | ND |
| ST. JOSEPH, MO | 83,083 | ND | ND | ND | ND | 32 | 126 | 0.008 | 0.079 |
| ST. LOUIS, MO-IL | 1,836,302 | 6 | 5.74(n) | 0.025 | 0.13 | 40 | 107 | 0.012 | 0.102 |
| SALEM, OR | 278,024 | 7 | ND | ND | 0.12 | ND | ND | ND | ND |
| SALINAS, CA | 355,660 | 2 | ND | 0.011 | 0.09 | 20 | 40 | ND | ND |
| SALT LAKE CITY-OGDEN, UT | 1,072,227 | 7 | 0.03 | 0.026 | 0.12 | 47 | 157 | 0.004 | 0.021 |
| SAN ANGELO, TX | 98,458 | ND | ND | ND | ND | ND | ND | ND | ND |
| SAN ANTONIO, TX | 1,324,749 | 5 | 0.02 | 0.009 | 0.13 | 20 | 38 | ND | ND |
| SAN DIEGO, CA | 2,498,016 | 6 | 0.02 | 0.022 | 0.13 | 30 | 92 | 0.005 | 0.017 |
| SAN FRANCISCO, CA | 1,603,678 | 5 | 0.01 | 0.022 | 0.10 | 24 | 59 | 0.002 | 0.007 |
| SAN JOSE, CA | 1,497,577 | 6 | 0.01 | 0.025 | 0.12 | 25 | 68 | ND | ND |
| SAN JUAN-BAYAMON, PR | 1,836,302 | 7 | ND | ND | ND | 34 | 95 | 0.006 | 0.022 |
| SAN LUIS OBISPO-ATASCADERO-PASO ROBLE, CA | 217,162 | 2 | ND | 0.013 | 0.11 | 21 | 96 | 0.006 | 0.029 |
| SANTA BARBARA-SANTA MARIA-LOMPOC, CA | 369,608 | 5 | 0.00 | 0.019 | 0.13 | 29 | 63 | 0.001 | 0.006 |
| SANTA CRUZ-WATSONVILLE, CA | 229,734 | 1 | ND | 0.005 | 0.10 | 33 | 69 | 0.002 | 0.003 |
| SANTA FE, NM | 117,043 | 2 | ND | ND | ND | 14 | 33 | ND | ND |
| SANTA ROSA, CA | 388,222 | 3 | ND | 0.014 | 0.09 | 17 | 39 | ND | ND |
| SARASOTA-BRADENTON, FL | 489,483 | 5 | ND | ND | 0.09 | 27 | 73 | 0.002 | 0.018 |
| SAVANNAH, GA | 258,060 | ND | ND | ND | 0.09 | ND | ND | 0.005 | 0.030 |
| SCRANTON—WILKES-BARRE—HAZLETON, PA | 638,466 | 4 | ND | 0.018 | 0.11 | 24 | 61 | 0.007 | 0.033 |
| SEATTLE-BELLEVUE-EVERETT, WA | 2,033,156 | 7 | 0.66(o) | 0.020 | 0.12 | 24 | 93 | 0.006 | 0.019 |
| SHARON, PA | 121,003 | ND | 0.07 | ND | 0.10 | IN | 52 | 0.007 | 0.029 |
| SHEBOYGAN, WI | 103,877 | ND | ND | ND | 0.11 | ND | ND | ND | ND |
| SHERMAN-DENISON, TX | 95,021 | ND | ND | ND | ND | ND | ND | ND | ND |
| SHREVEPORT-BOSSIER CITY, LA | 376,330 | ND | ND | ND | 0.10 | 22 | 47 | 0.002 | 0.004 |
| SIOUX CITY, IA-NE | 115,018 | ND | ND | ND | ND | IN | 95 | ND | ND |
| SIOUX FALLS, SD | 139,236 | ND | ND | ND | ND | 19 | 53 | ND | ND |
| SOUTH BEND, IN | 247,052 | 3 | ND | 0.011 | 0.11 | 20 | 45 | ND | ND |
| SPOKANE, WA | 361,364 | 9 | ND | ND | 0.08 | 32 | 110 | ND | ND |
| SPRINGFIELD, IL | 189,550 | 3 | ND | ND | 0.10 | IN | 26 | 0.006 | 0.061 |
| SPRINGFIELD, MO | 264,346 | 3 | ND | 0.011 | 0.10 | 41 | 148 | 0.008 | 0.089 |
| SPRINGFIELD, MA | 587,884 | 8 | ND | 0.024 | 0.11 | 30 | 67 | 0.007 | 0.028 |
| STAMFORD-NORWALK, CT | 329,935 | 4 | ND | ND | 0.12 | 32 | 65 | 0.005 | 0.026 |
| STATE COLLEGE, PA | 123,786 | ND | ND | ND | 0.09 | ND | ND | ND | ND |
| STEUBENVILLE-WEIRTON, OH-WV | 142,523 | 6 | 0.04 | 0.020 | 0.10 | 37 | 170 | 0.014 | 0.066 |
| STOCKTON-LODI, CA | 480,628 | 7 | 0.00 | 0.023 | 0.13 | 27 | 61 | ND | ND |
| SUMTER, SC | 102,637 | ND | 0.01 | ND | ND | ND | ND | ND | ND |
| SYRACUSE, NY | 742,177 | 4 | ND | ND | 0.09 | 24 | 61 | 0.003 | 0.015 |
| TACOMA, WA | 586,203 | 6 | ND | ND | 0.10 | 22 | 74 | 0.006 | 0.028 |
| TALLAHASSEE, FL | 233,598 | ND | ND | ND | 0.09 | IN | 33 | ND | ND |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | 2,067,959 | 4 | 2.81(p) | 0.011 | 0.11 | 35 | 81 | 0.007 | 0.087 |
| TERRE HAUTE, IN | 147,585 | 3 | ND | ND | 0.11 | 27 | 53 | 0.012 | 0.039 |
| TEXARKANA, TX-TEXARKANA, AR | 120,132 | ND | ND | ND | ND | 23 | 50 | ND | ND |
| TOLEDO, OH | 614,128 | 3 | 0.44(q) | ND | 0.11 | 23 | 69 | 0.005 | 0.049 |
| TOPEKA, KS | 160,976 | ND | 0.01 | ND | ND | 21 | 58 | ND | ND |
| TRENTON, NJ | 325,824 | ND | ND | 0.017 | 0.12 | 27 | 59 | ND | ND |
| TUSCON, AZ | 666,880 | 5 | 0.05 | 0.019 | 0.09 | 38 | 81 | 0.001 | 0.004 |
| TULSA, OK | 708,954 | 7 | 0.11 | 0.015 | 0.12 | IN | 76 | 0.008 | 0.042 |
| TUSCALOOSA, AL | 150,522 | ND | ND | ND | ND | IN | 58 | ND | ND |
| TYLER, TX | 151,309 | ND | ND | ND | 0.10 | IN | 30 | ND | ND |
| UTICA-ROME, NY | 316,633 | ND | ND | ND | 0.08 | 20 | 43 | 0.002 | 0.009 |
| VALLEJO-FAIRFIELD-NAPA, CA | 451,186 | 5 | ND | 0.015 | 0.12 | 20 | 43 | 0.002 | 0.006 |
| VENTURA, CA | 669,016 | 3 | 0.00 | 0.022 | 0.14 | 30 | 79 | 0.001 | 0.003 |

Table A-14. Maximum Air Quality Concentrations by Metropolitan Statistical Area, 1996 (continued)

| Metropolitan Statistical Area | 1990 Population | CO 8-hr (ppm) | Pb QMAX (µgm) | NO ₂ AM (ppm) | O ₃ 2nd MAX (ppm) | PM ₁₀ WTD AM (µgm) | PM ₁₀ 2nd MAX (µgm) | SO ₂ AM (ppm) | SO ₂ 24-hr (ppm) |
|----------------------------------|-----------------|---------------|---------------|--------------------------|------------------------------|-------------------------------|--------------------------------|--------------------------|-----------------------------|
| VICTORIA, TX | 74,361 | ND | ND | ND | 0.09 | ND | ND | ND | ND |
| VINELAND-MILLVILLE-BRIDGETON, NJ | 138,053 | ND | ND | ND | 0.11 | ND | ND | 0.005 | 0.016 |
| VISALIA-TULARE-PORTERVILLE, CA | 311,921 | 4 | ND | 0.018 | 0.14 | 45 | 87 | ND | ND |
| WACO, TX | 189,123 | ND | ND | ND | ND | ND | ND | ND | ND |
| WASHINGTON, DC-MD-VA-WV | 4,223,485 | 5 | 0.02 | 0.026 | 0.12 | 23 | 57 | 0.009 | 0.048 |
| WATERBURY, CT | 221,629 | ND | 0.04 | ND | ND | 27 | 69 | 0.005 | 0.022 |
| WATERLOO-CEDAR FALLS, IA | 123,798 | ND | ND | ND | ND | 32 | 59 | ND | ND |
| WAUSAU, WI | 115,400 | ND | ND | ND | 0.08 | 25 | 50 | 0.003 | 0.015 |
| WEST PALM BEACH-BOCA RATON, FL | 863,518 | 4 | 0.00 | 0.012 | 0.09 | 23 | 56 | 0.002 | 0.014 |
| WHEELING, WV-OH | 159,301 | 4 | ND | ND | 0.11 | 28 | 86 | 0.015 | 0.072 |
| WICHITA, KS | 485,270 | 6 | 0.02 | ND | 0.10 | 26 | 119 | 0.005 | 0.007 |
| WICHITA FALLS, TX | 130,351 | ND | ND | ND | ND | 19 | 50 | ND | ND |
| WILLIAMSPORT, PA | 118,710 | ND | ND | ND | 0.08 | 25 | 46 | 0.006 | 0.028 |
| WILMINGTON-NEWARK, DE-MD | 513,293 | 4 | ND | 0.019 | 0.12 | 32 | 81 | 0.011 | 0.067 |
| WILMINGTON, NC | 171,269 | ND | ND | ND | 0.09 | IN | 46 | 0.006 | 0.036 |
| WORCESTER, MA-CT | 478,384 | 5 | ND | 0.019 | 0.09 | IN | 46 | 0.005 | 0.021 |
| YAKIMA, WA | 188,823 | 7 | ND | ND | ND | 31 | 112 | ND | ND |
| YOLO, CA | 141,092 | 1 | ND | 0.011 | 0.11 | 28 | 65 | ND | ND |
| YORK, PA | 339,574 | 3 | 0.07 | 0.021 | 0.10 | 28 | 53 | 0.007 | 0.022 |
| YOUNGSTOWN-WARREN, OH | 600,859 | ND | 0.04 | 0.019 | 0.11 | 33 | 86 | 0.012 | 0.057 |
| YUBA CITY, CA | 122,643 | 4 | ND | 0.012 | 0.11 | 29 | 69 | ND | ND |
| YUMA, AZ | 106,895 | ND | ND | ND | 0.10 | IN | 59 | ND | ND" |

CO = Highest second maximum non-overlapping 8-hour concentration (Applicable NAAQS is 9 ppm)

Pb = Highest quarterly maximum concentration (Applicable NAAQS is 1.5 µg/m³)NO₂ = Highest arithmetic mean concentration (Applicable NAAQS is 0.053 ppm)O₃ = Highest second daily maximum 1-hour concentration (Applicable NAAQS is 0.12 ppm)PM₁₀ = Highest weighted annual mean concentration (Applicable NAAQS is 50 µg/m³)

Data from exceptional events not included.

SO₂ = Highest second maximum 24-hour concentration (Applicable NAAQS is 150 µg/m³)SO₂ = Highest annual mean concentration (Applicable NAAQS is 0.03 ppm)SO₂ = Highest second maximum 24-hour concentration (Applicable NAAQS is 0.14 ppm)

ND = Indicates data not available

IN = Indicates insufficient data to calculate summary statistic

WTD = Weighted

AM = Annual mean

UGM = Units are micrograms per cubic meter

PPM = Units are parts per million

* - Localized impact from electric utility and switching to low sulfur coal per SIP.

(a) - Localized impact from an industrial source in Chicago, IL. Highest population-oriented site in Chicago, IL is 0.06 µg/m³.(b) - Localized impact from an industrial source in Cleveland, OH. This facility has been shut down. Highest population-oriented site in Cleveland, OH is 0.04 µg/m³.(c) - Localized impact from an industrial source in Columbus, GA. Highest population-oriented site in Columbus, GA is 0.11 µg/m³.(d) - Localized impact from an industrial source in Collin Co., TX. Highest population-oriented site in Dallas, TX is 0.17 µg/m³.(e) - Localized impact from an industrial source in Hammond, IN. Highest population-oriented site in Hammond is 0.04 µg/m³.(f) - Localized impact from an industrial source in Indianapolis, IN. Highest population-oriented site in Indianapolis, IN is 0.07 µg/m³.(g) - Localized impact from an industrial source in Memphis, TN. Highest population-oriented site in Memphis, TN is 0.03 µg/m³.(h) - Localized impact from an industrial source in Eagan, MN. Highest population-oriented site in Minneapolis, MN is 0.01 µg/m³.

(i) - Localized impact from an industrial source in Muncie, IN.

(j) - Localized impact from an industrial source in Williamston, CO., TN. Highest population-oriented site in Nashville, TN is 0.07 µg/m³.(k) - Localized impact from an industrial source in Omaha, NE. Highest population-oriented site in Omaha, NE is 0.02 µg/m³.(l) - Localized impact from an industrial source in Philadelphia, PA. Highest population-oriented site in Philadelphia, PA is 0.76 µg/m³.

(m) - Localized impact from an industrial source in Laureldale, PA.

(n) - Localized impact from an industrial source in Herculaneum, MO. Highest population-oriented site in St. Louis, MO is 0.03 µg/m³.

(o) - Localized impact from an industrial source in Seattle.

(p) - Localized impact from an industrial source in Tampa, FL.

(q) - Localized impact from an industrial source in Toledo, OH.

Note: The reader is cautioned that this summary is not adequate in itself to numerically rank MSAs according to their air quality. The monitoring data represent the quality of air in the vicinity of the monitoring site but may not necessarily represent urban-wide air quality.

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---------------------------------------|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| AKRON, OH | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 5.1 | 4.6 | 5.2 | 5.7 | 3.3 | 4.1 | 3.1 | 5.3 | 3.3 | 3.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.13 | 0.07 | 0.10 | 0.04 | 0.06 | 0.05 | 0.06 | 0.06 | 0.03 | 0.04 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.13 | 0.16 | 0.13 | 0.11 | 0.12 | 0.11 | 0.11 | 0.10 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 72 | 72 | 61 | 59 | 57 | 62 | 62 | 63 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 34 | 34 | 26 | 28 | 27 | 25 | 28 | 26 | 25 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.014 | 0.015 | 0.015 | 0.015 | 0.015 | 0.013 | 0.015 | 0.012 | 0.009 | 0.010 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.045 | 0.056 | 0.053 | 0.061 | 0.051 | 0.064 | 0.056 | 0.042 | 0.046 | 0.042 |
| ALBANY-SCHENECTADY-TROY, NY | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 7.5 | 6.2 | 5.7 | 6.2 | 5.4 | 4.7 | 3.8 | 5.2 | 4.3 | 3.7 |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.08 | 0.05 | 0.04 | 0.13 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.03 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.11 | 0.12 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 46 | 46 | 46 | 51 | 54 | 51 | 57 | 49 | 43 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 22 | 22 | 22 | 22 | 21 | 20 | 22 | 19 | 19 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.007 | 0.006 | 0.005 | 0.006 | 0.007 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.027 | 0.039 | 0.022 | 0.028 | 0.030 | 0.022 | 0.026 | 0.027 | 0.016 | 0.021 |
| ALBUQUERQUE, NM | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 5 | 8.6 | 6.6 | 6.6 | 6.2 | 5.6 | 5.1 | 5.4 | 5.0 | 5.2 | 4.5 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.018 | 0.018 | 0.019 | 0.018 | 0.004 | 0.021 | 0.024 | 0.023 | 0.018 | 0.022 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 7 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 9 | — | 79 | 75 | 58 | 52 | 46 | 52 | 53 | 58 | 52 |
| | WEIGHTED ANNUAL MEAN | NS | 9 | — | 37 | 35 | 26 | 23 | 24 | 25 | 24 | 25 | 25 |
| ALEXANDRIA, LA | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 43 | 43 | 43 | 44 | 48 | 43 | 49 | 45 | 42 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 23 | 23 | 23 | 22 | 25 | 21 | 23 | 21 | 19 |
| ALLENTOWN-BETHLEHEM-EASTON, PA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 4.7 | 6.8 | 4.8 | 5.3 | 5.3 | 3.8 | 3.6 | 6.6 | 4.7 | 3.2 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.43 | 0.84 | 0.44 | 0.24 | 0.27 | 0.18 | 0.12 | 0.11 | 0.06 | 0.06 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.019 | 0.020 | 0.020 | 0.017 | 0.018 | 0.018 | 0.020 | 0.021 | 0.018 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.12 | 0.15 | 0.10 | 0.11 | 0.12 | 0.10 | 0.11 | 0.11 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 65 | 63 | 74 | 62 | 38 | 60 | 64 | 57 | 57 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 28 | 28 | 27 | 27 | 20 | 23 | 25 | 24 | 24 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.012 | 0.012 | 0.010 | 0.010 | 0.008 | 0.008 | 0.009 | 0.010 | 0.010 | 0.010 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.035 | 0.049 | 0.047 | 0.044 | 0.033 | 0.030 | 0.027 | 0.042 | 0.027 | 0.033 |
| ALTOONA, PA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.13 | 0.14 | 0.10 | 0.10 | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 75 | 60 | 53 | 65 | 38 | 62 | 74 | 57 | 57 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 31 | 25 | 21 | 26 | 21 | 23 | 26 | 25 | 25 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.010 | 0.011 | 0.011 | 0.011 | 0.009 | 0.009 | 0.010 | 0.008 | 0.008 | 0.008 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.051 | 0.051 | 0.059 | 0.062 | 0.044 | 0.046 | 0.052 | 0.058 | 0.037 | 0.033 |
| ANCHORAGE, AK | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 97 | 79 | 107 | 104 | 130 | 102 | 95 | 115 | 89 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 28 | 26 | 31 | 30 | 31 | 28 | 27 | 26 | 25 |
| ANN ARBOR, MI | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.13 | 0.13 | 0.10 | 0.09 | 0.11 | 0.10 | 0.10 | 0.09 | 0.11 | 0.10 |
| ANNISTON, AL | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 64 | 64 | 64 | 78 | 45 | 69 | 44 | 62 | 31 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 28 | 28 | 28 | 29 | 25 | 25 | 24 | 23 | 19 |
| APPLETON-OSHKOSH-NEENAH, WI | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.10 | 0.11 | 0.09 | 0.08 | 0.09 | 0.09 | 0.07 | 0.08 | 0.08 | 0.08 |
| ASHEVILLE, NC | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.08 | 0.08 | 0.08 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 75 | 53 | 49 | 53 | 41 | 53 | 33 | 38 | 37 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 29 | 29 | 25 | 24 | 23 | 22 | 19 | 18 | 19 |
| ATLANTA, GA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.9 | 5.3 | 6.2 | 5.4 | 6.5 | 5.1 | 4.9 | 5.3 | 4.5 | 3.7 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.07 | 0.05 | 0.04 | 0.03 | 0.04 | 0.03 | 0.02 | 0.03 | 0.05 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.024 | 0.024 | 0.023 | 0.021 | 0.020 | 0.020 | 0.020 | 0.018 | 0.017 | 0.021 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.16 | 0.16 | 0.12 | 0.14 | 0.12 | 0.12 | 0.15 | 0.12 | 0.14 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 87 | 73 | 96 | 78 | 61 | 72 | 61 | 55 | 58 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 41 | 37 | 46 | 36 | 31 | 31 | 30 | 31 | 29 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.006 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.004 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.035 | 0.041 | 0.043 | 0.026 | 0.032 | 0.028 | 0.036 | 0.023 | 0.018 | 0.018 |
| ATLANTIC-CAPE MAY, NJ | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.06 | 0.04 | 0.07 | 0.02 | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.14 | 0.15 | 0.12 | 0.16 | 0.14 | 0.12 | 0.12 | 0.10 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 82 | 69 | 59 | 71 | 51 | 58 | 56 | 66 | 66 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 41 | 37 | 34 | 34 | 31 | 30 | 33 | 32 | 32 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.004 | 0.006 | 0.005 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.016 | 0.025 | 0.029 | 0.012 | 0.011 | 0.016 | 0.014 | 0.019 | 0.011 | 0.014 |
| AUGUSTA-AIKEN, GA-SC | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.03 | 0.02 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.11 | 0.09 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | 0.11 | 0.10 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---------------------------------------|---|-----------|--------------|-------|---------|---------|---------|---------|--------|--------|---------|--------|-------|
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN DOWN | 1 1 | — 27 | 67 21 | 49 22 | 53 23 | 50 22 | 42 22 | 51 21 | 45 20 | 40 19 | 41 19 |
| AUSTIN-SAN MARCOS, TX | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.2 | 4.2 | 4.2 | 5.9 | 3.4 | 3.7 | 3.0 | 5.8 | 3.5 | 3.2 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.017 | 0.017 | 0.017 | 0.017 | 0.016 | 0.017 | 0.017 | 0.018 | 0.021 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.11 | 0.11 | 0.11 | 0.10 | 0.09 | 0.09 | 0.10 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 2 | — 26 | 56 25 | 44 21 | 43 24 | 40 23 | 48 19 | 51 20 | 45 22 | 41 19 | 31 19 |
| BAKERSFIELD, CA | | | | | | | | | | | | | |
| NO ₂ | ARITHMETIC MEAN | DOWN | 3 | 0.017 | 0.018 | 0.017 | 0.016 | 0.016 | 0.015 | 0.014 | 0.014 | 0.012 | 0.012 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.15 | 0.15 | 0.14 | 0.14 | 0.14 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 1 | — 199 | 199 158 | 158 165 | 165 169 | 169 104 | 104 96 | 96 131 | 131 111 | 111 64 | 64 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.006 | 0.004 | 0.004 | 0.002 | 0.003 | 0.002 | 0.003 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.016 | 0.016 | 0.014 | 0.011 | 0.010 | 0.010 | 0.010 | 0.007 | 0.008 | 0.009 |
| BALTIMORE, MD | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 4 | 7.3 | 7.7 | 6.7 | 6.9 | 6.1 | 5.4 | 5.2 | 5.5 | 4.3 | 3.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.09 | 0.08 | 0.07 | 0.05 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.031 | 0.030 | 0.030 | 0.029 | 0.029 | 0.026 | 0.027 | 0.028 | 0.025 | 0.025 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 6 | 0.15 | 0.17 | 0.12 | 0.12 | 0.13 | 0.12 | 0.13 | 0.13 | 0.14 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 3 | — 82 | 73 69 | 74 74 | 74 59 | 59 63 | 63 70 | 65 65 | 57 | 57 | 57 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 3 | — 36 | 36 30 | 30 35 | 30 30 | 29 29 | 29 30 | 28 28 | 27 | 27 | 27 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.011 | 0.012 | 0.012 | 0.008 | 0.009 | 0.009 | 0.008 | 0.009 | 0.006 | 0.007 |
| BANGOR, ME | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | NS DOWN | 1 1 | — 58 | 54 26 | 37 21 | 48 25 | 70 22 | 52 22 | 59 22 | 51 20 | 34 19 | 34 19 |
| BATON ROUGE, LA | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.21 | 0.10 | 0.09 | 0.06 | 0.03 | 0.03 | 0.02 | 0.02 | 0.04 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.019 | 0.017 | 0.015 | 0.014 | 0.015 | 0.016 | 0.012 | 0.016 | 0.016 | 0.015 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.14 | 0.15 | 0.14 | 0.15 | 0.13 | 0.11 | 0.11 | 0.12 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 2 | — 54 | 57 56 | 56 62 | 57 57 | 47 47 | 47 54 | 49 49 | 43 43 | 43 43 | 43 43 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.007 | 0.007 | 0.007 | 0.005 | 0.009 | 0.008 | 0.006 | 0.008 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.030 | 0.029 | 0.056 | 0.022 | 0.036 | 0.033 | 0.021 | 0.025 | 0.034 | 0.024 |
| BEAUMONT-PORT ARTHUR, TX | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.0 | 3.0 | 2.0 | 2.3 | 2.3 | 2.4 | 3.3 | 2.0 | 1.7 | 2.1 |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.04 | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| NO ₂ | ARITHMETIC MEAN | UP | 1 | 0.007 | 0.007 | 0.007 | 0.005 | 0.008 | 0.009 | 0.010 | 0.012 | 0.010 | 0.008 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.13 | 0.15 | 0.14 | 0.12 | 0.13 | 0.13 | 0.12 | 0.11 | 0.14 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | NS | 1 | — 48 | 48 48 | 48 58 | 58 53 | 53 56 | 56 45 | 45 56 | 56 34 | 34 34 | 34 34 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.009 | 0.008 | 0.008 | 0.009 | 0.008 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.053 | 0.046 | 0.088 | 0.042 | 0.059 | 0.044 | 0.047 | 0.039 | 0.025 | 0.041 |
| BELLINGHAM, WA | | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.008 | 0.005 | 0.006 | 0.007 | 0.006 | 0.007 | 0.006 | 0.007 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.025 | 0.026 | 0.018 | 0.028 | 0.021 | 0.022 | 0.017 | 0.019 | 0.018 | 0.013 |
| BERGEN-PASSAIC, NJ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 7.5 | 6.8 | 7.5 | 6.8 | 6.6 | 4.5 | 5.2 | 6.2 | 4.9 | 3.8 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.13 | 0.09 | 0.05 | 0.04 | 0.03 | 0.02 | 0.03 | 0.08 | 0.03 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.036 | 0.036 | 0.035 | 0.031 | 0.031 | 0.030 | 0.029 | 0.031 | 0.029 | 0.028 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.17 | 0.19 | 0.12 | 0.13 | 0.14 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 3 | — 83 | 70 83 | 79 79 | 60 71 | 71 91 | 91 72 | 72 53 | 53 31 | 31 31 | 31 31 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.010 | 0.012 | 0.011 | 0.010 | 0.010 | 0.009 | 0.008 | 0.007 | 0.005 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.037 | 0.053 | 0.045 | 0.041 | 0.035 | 0.040 | 0.026 | 0.037 | 0.027 | 0.022 |
| BILLINGS, MT | | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | DOWN | 3 | 0.022 | 0.021 | 0.019 | 0.016 | 0.016 | 0.021 | 0.022 | 0.016 | 0.014 | 0.010 |
| | SECOND MAX 24-HOUR | DOWN | 3 | 0.107 | 0.108 | 0.086 | 0.070 | 0.070 | 0.081 | 0.104 | 0.072 | 0.066 | 0.065 |
| BILOXI-GULFPORT-PASCAGOULA, MS | | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.006 | 0.006 | 0.007 | 0.006 | 0.006 | 0.004 | 0.003 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.022 | 0.022 | 0.029 | 0.037 | 0.034 | 0.020 | 0.029 | 0.022 | 0.024 | 0.043 |
| BIRMINGHAM, AL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 4 | 7.6 | 7.4 | 7.4 | 6.9 | 7.0 | 6.6 | 6.6 | 6.6 | 6.2 | 5.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 1.59 | 2.51 | 1.23 | 0.91 | 1.34 | 0.62 | 0.19 | 0.09 | 0.08 | 0.10 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 6 | 0.12 | 0.12 | 0.10 | 0.12 | 0.10 | 0.11 | 0.11 | 0.10 | 0.12 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 6 | — 76 | 62 69 | 75 75 | 54 62 | 62 49 | 49 54 | 54 46 | 46 25 | 25 25 | 25 25 |
| BISMARCK, ND | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN | 1 | — 43 | 51 84 | 51 51 | 45 45 | 45 45 | 40 40 | 36 36 | 36 36 | 36 36 | 36 36 |
| BOISE CITY, ID | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | NS DOWN | 3 3 | — 92 | 107 67 | 129 79 | 80 80 | 90 90 | 74 74 | 74 74 | 74 74 | 74 74 | 74 74 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BOSTON, MA-NH | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 6.2 | 5.3 | 5.2 | 5.9 | 4.0 | 4.5 | 3.6 | 4.5 | 3.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.11 | 0.16 | 0.07 | 0.04 | 0.03 | 0.03 | 0.02 | 0.01 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 6 | 0.029 | 0.029 | 0.028 | 0.027 | 0.027 | 0.026 | 0.027 | 0.027 | 0.024 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 4 | 0.12 | 0.15 | 0.12 | 0.10 | 0.13 | 0.11 | 0.11 | 0.11 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 8 | — | 54 | 52 | 53 | 51 | 51 | 51 | 48 | 42 |
| | WEIGHTED ANNUAL MEAN | DOWN | 8 | — | 27 | 27 | 25 | 24 | 22 | 22 | 21 | 22 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 10 | 0.011 | 0.012 | 0.011 | 0.010 | 0.009 | 0.009 | 0.009 | 0.008 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 10 | 0.044 | 0.050 | 0.044 | 0.039 | 0.031 | 0.038 | 0.033 | 0.033 | 0.024 |
| BOULDER-LONGMONT, CO | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 8.7 | 6.0 | 6.5 | 4.8 | 4.2 | 5.1 | 4.1 | 2.7 | 3.7 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.12 | 0.12 | 0.11 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 78 | 85 | 70 | 71 | 61 | 73 | 47 | 45 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 28 | 29 | 23 | 23 | 23 | 24 | 19 | 17 |
| BRAZORIA, TX | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.14 | 0.14 | 0.15 | 0.15 | 0.13 | 0.13 | 0.13 | 0.11 | 0.15 |
| BRIDGEPORT, CT | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.3 | 6.5 | 5.2 | 5.0 | 5.5 | 4.7 | 3.7 | 5.8 | 4.9 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.027 | 0.027 | 0.026 | 0.026 | 0.025 | 0.024 | 0.024 | 0.026 | 0.024 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.20 | 0.22 | 0.16 | 0.15 | 0.15 | 0.12 | 0.16 | 0.15 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 54 | 48 | 52 | 55 | 45 | 45 | 54 | 51 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 26 | 25 | 23 | 25 | 20 | 19 | 22 | 19 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.012 | 0.012 | 0.012 | 0.011 | 0.010 | 0.010 | 0.009 | 0.009 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.051 | 0.060 | 0.047 | 0.048 | 0.042 | 0.037 | 0.033 | 0.051 | 0.031 |
| BROCKTON, MA | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.13 | 0.13 | 0.12 | 0.15 | 0.11 | 0.11 | 0.12 | 0.13 |
| BROWNSVILLE-HARLINGEN-SAN BENITO, TX | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 49 | 49 | 49 | 68 | 59 | 67 | 51 | 48 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 24 | 24 | 24 | 26 | 27 | 25 | 24 | 23 |
| BUFFALO-NIAGARA FALLS, NY | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 4.7 | 4.1 | 4.4 | 3.4 | 3.1 | 4.6 | 3.4 | 3.2 | 2.6 |
| LEAD | MAX QUARTERLY MEAN | NS | 2 | 0.08 | 0.07 | 0.04 | 0.04 | 0.03 | 0.03 | 0.04 | 0.05 | 0.04 |
| NO ₂ | ARITHMETIC MEAN | NS | 2 | 0.022 | 0.021 | 0.022 | 0.020 | 0.018 | 0.018 | 0.017 | 0.019 | 0.019 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.13 | 0.14 | 0.10 | 0.11 | 0.11 | 0.11 | 0.09 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 12 | — | 59 | 57 | 49 | 61 | 52 | 63 | 40 | 44 |
| | WEIGHTED ANNUAL MEAN | DOWN | 12 | — | 26 | 25 | 20 | 25 | 22 | 19 | 19 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.012 | 0.013 | 0.012 | 0.011 | 0.012 | 0.011 | 0.010 | 0.010 | 0.008 |
| | SECOND MAX 24-HOUR | DOWN | 4 | 0.056 | 0.062 | 0.051 | 0.054 | 0.062 | 0.058 | 0.042 | 0.039 | 0.040 |
| BURLINGTON, VT | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.7 | 3.7 | 3.7 | 4.6 | 3.8 | 3.9 | 3.9 | 3.9 | 2.5 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.019 | 0.019 | 0.019 | 0.018 | 0.017 | 0.016 | 0.017 | 0.017 | 0.017 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 38 | 45 | 62 | 53 | 50 | 45 | 47 | 45 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 23 | 25 | 24 | 23 | 23 | 21 | 21 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.007 | 0.007 | 0.008 | 0.008 | 0.003 | 0.003 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.018 | 0.027 | 0.031 | 0.021 | 0.022 | 0.013 | 0.011 | 0.013 | 0.006 |
| CANTON-MASSILLION, OH | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.12 | 0.14 | 0.11 | 0.10 | 0.11 | 0.09 | 0.10 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 79 | 77 | 65 | 61 | 59 | 63 | 60 | 60 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 34 | 35 | 30 | 31 | 28 | 26 | 28 | 25 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.010 | 0.011 | 0.012 | 0.011 | 0.010 | 0.010 | 0.010 | 0.009 | 0.006 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.045 | 0.039 | 0.041 | 0.036 | 0.037 | 0.040 | 0.046 | 0.052 | 0.033 |
| CEDAR RAPIDS, IA | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 3.3 | 4.2 | 2.9 | 4.8 | 4.5 | 4.2 | 4.1 | 3.4 | 2.5 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.09 | 0.08 | 0.08 | 0.07 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 67 | 73 | 71 | 62 | 60 | 47 | 46 | 56 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 35 | 33 | 28 | 29 | 27 | 22 | 23 | 23 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 5 | 0.007 | 0.006 | 0.007 | 0.006 | 0.006 | 0.005 | 0.004 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 5 | 0.052 | 0.047 | 0.049 | 0.048 | 0.040 | 0.036 | 0.037 | 0.029 | 0.028 |
| CHAMPAIGN-URBANA, IL | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.10 | 0.09 | 0.09 | 0.08 | 0.09 | 0.07 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 70 | 70 | 66 | 61 | 71 | 50 | 50 | 39 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 32 | 32 | 28 | 30 | 31 | 22 | 25 | 19 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.005 | 0.005 | 0.005 | 0.004 | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.021 | 0.025 | 0.025 | 0.030 | 0.038 | 0.018 | 0.015 | 0.024 | 0.011 |
| CHARLESTON-NORTH CHARLESTON, SC | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 5.4 | 7.5 | 5.9 | 4.7 | 4.9 | 5.2 | 5.8 | 4.0 | 6.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.05 | 0.03 | 0.02 | 0.03 | 0.04 | 0.01 | 0.01 | 0.01 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.10 | 0.11 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 63 | 55 | 59 | 46 | 46 | 40 | 48 | 40 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 29 | 29 | 27 | 25 | 23 | 22 | 21 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.005 | 0.005 | 0.005 | 0.003 | 0.005 | 0.005 | 0.004 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.042 | 0.063 | 0.044 | 0.027 | 0.030 | 0.035 | 0.025 | 0.038 | 0.019 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CHARLESTON, WV | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.7 | 2.8 | 2.9 | 2.8 | 3.1 | 3.3 | 2.2 | 3.5 | 2.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.04 | 0.02 | 0.02 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.025 | 0.024 | 0.021 | 0.020 | 0.020 | 0.017 | 0.018 | 0.019 | 0.020 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.16 | 0.10 | 0.12 | 0.12 | 0.07 | 0.08 | 0.10 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 83 | 88 | 72 | 59 | 50 | 59 | 57 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 37 | 35 | 36 | 29 | 28 | 29 | 28 | 26 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.011 | 0.013 | 0.014 | 0.012 | 0.009 | 0.009 | 0.009 | 0.010 | 0.007 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.045 | 0.049 | 0.062 | 0.056 | 0.036 | 0.031 | 0.034 | 0.037 | 0.023 |
| CHARLOTTE-GASTONIA-ROCK HILL, NC-SC | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 5 | 6.7 | 6.7 | 7.0 | 7.1 | 6.3 | 6.0 | 5.6 | 5.8 | 4.7 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.07 | 0.07 | 0.03 | 0.04 | 0.01 | 0.08 | 0.02 | 0.03 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.13 | 0.16 | 0.12 | 0.12 | 0.12 | 0.10 | 0.13 | 0.11 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 68 | 55 | 57 | 57 | 54 | 52 | 47 | 48 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 35 | 34 | 33 | 30 | 30 | 29 | 29 | 28 |
| CHARLOTTESVILLE, VA | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 72 | 64 | 53 | 57 | 37 | 54 | 40 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 40 | 30 | 27 | 28 | 22 | 24 | 22 | 23 |
| CHATTANOOGA, TN-GA | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.12 | 0.10 | 0.12 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 76 | 67 | 72 | 75 | 72 | 61 | 63 | 58 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 39 | 36 | 38 | 38 | 34 | 32 | 33 | 32 |
| CHICAGO, IL | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 6 | 4.6 | 5.0 | 4.8 | 5.3 | 4.3 | 4.8 | 4.7 | 6.5 | 3.7 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 8 | 0.10 | 0.15 | 0.10 | 0.08 | 0.06 | 0.07 | 0.06 | 0.06 | 0.05 |
| NO ₂ | ARITHMETIC MEAN | NS | 5 | 0.029 | 0.030 | 0.030 | 0.026 | 0.025 | 0.027 | 0.028 | 0.031 | 0.031 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 16 | 0.14 | 0.14 | 0.11 | 0.09 | 0.11 | 0.10 | 0.09 | 0.10 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 13 | — | 91 | 84 | 99 | 78 | 79 | 78 | 92 | 75 |
| | WEIGHTED ANNUAL MEAN | DOWN | 13 | — | 39 | 39 | 37 | 35 | 34 | 33 | 37 | 31 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 9 | 0.008 | 0.008 | 0.007 | 0.006 | 0.007 | 0.006 | 0.006 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 9 | 0.036 | 0.031 | 0.028 | 0.024 | 0.029 | 0.026 | 0.028 | 0.030 | 0.023 |
| CHICO-PARADISE, CA | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 5.6 | 7.2 | 6.4 | 6.2 | 7.4 | 5.9 | 4.7 | 4.6 | 4.1 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.017 | 0.016 | 0.016 | 0.015 | 0.016 | 0.016 | 0.016 | 0.015 | 0.014 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.10 | 0.10 | 0.12 | 0.09 | 0.09 | 0.10 | 0.09 | 0.10 |
| CINCINNATI, OH-KY-IN | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 3 | 5.0 | 3.8 | 4.9 | 4.2 | 4.2 | 4.5 | 4.7 | 4.3 | 3.4 |
| LEAD | MAX QUARTERLY MEAN | NS | 2 | 0.09 | 0.13 | 0.09 | 0.11 | 0.06 | 0.05 | 0.05 | 0.04 | 0.05 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 3 | 0.027 | 0.025 | 0.026 | 0.024 | 0.024 | 0.022 | 0.023 | 0.024 | 0.023 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 6 | 0.13 | 0.14 | 0.11 | 0.12 | 0.12 | 0.09 | 0.10 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 7 | — | 94 | 94 | 91 | 66 | 60 | 70 | 68 | 69 |
| | WEIGHTED ANNUAL MEAN | DOWN | 7 | — | 40 | 41 | 36 | 32 | 30 | 31 | 30 | 28 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 6 | 0.012 | 0.011 | 0.012 | 0.012 | 0.011 | 0.010 | 0.011 | 0.008 | 0.007 |
| | SECOND MAX 24-HOUR | DOWN | 6 | 0.055 | 0.049 | 0.052 | 0.058 | 0.044 | 0.044 | 0.041 | 0.042 | 0.029 |
| CLARKSVILLE-HOPKINSVILLE, TN-KY | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.005 | 0.010 | 0.007 | 0.007 | 0.006 | 0.009 | 0.010 | 0.007 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.040 | 0.066 | 0.042 | 0.038 | 0.029 | 0.036 | 0.058 | 0.037 | 0.019 |
| CLEVELAND-LORAIN-ELYRIA, OH | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 6.0 | 5.7 | 5.9 | 4.7 | 4.7 | 5.1 | 4.3 | 5.3 | 3.7 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.31 | 0.26 | 0.19 | 0.32 | 0.18 | 0.21 | 0.21 | 0.14 | 0.11 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.022 | 0.023 | 0.025 | 0.022 | 0.022 | 0.021 | 0.022 | 0.021 | 0.020 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 6 | 0.12 | 0.14 | 0.10 | 0.11 | 0.11 | 0.10 | 0.11 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 7 | — | 85 | 93 | 87 | 82 | 79 | 77 | 93 | 97 |
| | WEIGHTED ANNUAL MEAN | NS | 7 | — | 42 | 41 | 36 | 38 | 33 | 32 | 39 | 36 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 9 | 0.011 | 0.011 | 0.012 | 0.010 | 0.010 | 0.009 | 0.008 | 0.008 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 9 | 0.045 | 0.044 | 0.042 | 0.041 | 0.039 | 0.038 | 0.039 | 0.040 | 0.023 |
| COLORADO SPRINGS, CO | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 8.3 | 11.5 | 7.7 | 6.8 | 6.5 | 6.0 | 5.4 | 4.6 | 5.1 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.08 | 0.08 | 0.08 | 0.07 | 0.08 | 0.07 | 0.06 | 0.07 | 0.07 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 73 | 74 | 68 | 75 | 65 | 71 | 63 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 30 | 30 | 25 | 27 | 24 | 27 | 25 | 23 |
| COLUMBIA, SC | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 7.0 | 7.4 | 6.5 | 5.8 | 6.0 | 6.3 | 5.6 | 4.7 | 4.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.09 | 0.06 | 0.03 | 0.03 | 0.05 | 0.04 | 0.02 | 0.02 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.13 | 0.10 | 0.11 | 0.10 | 0.11 | 0.10 | 0.11 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 5 | — | 66 | 57 | 59 | 49 | 54 | 48 | 40 | 44 |
| | WEIGHTED ANNUAL MEAN | DOWN | 5 | — | 31 | 30 | 29 | 25 | 26 | 25 | 24 | 23 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | 0.003 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.017 | 0.017 | 0.012 | 0.009 | 0.013 | 0.013 | 0.012 | 0.010 | 0.005 |
| COLUMBUS, GA-AL | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.10 | 0.09 | 0.10 | 0.09 | 0.09 | 0.10 | 0.10 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 43 | 43 | 63 | 75 | 51 | 50 | 49 | 54 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 26 | 26 | 29 | 27 | 26 | 25 | 27 | 22 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| COLUMBUS, OH | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 5.4 | 6.0 | 5.7 | 4.1 | 4.8 | 4.9 | 3.9 | 4.5 | 3.8 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.09 | 0.08 | 0.08 | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.14 | 0.11 | 0.11 | 0.12 | 0.09 | 0.10 | 0.10 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 69 | 80 | 84 | 64 | 64 | 66 | 64 | 60 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 31 | 34 | 32 | 31 | 27 | 27 | 27 | 26 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.009 | 0.008 | 0.008 | 0.008 | 0.007 | 0.006 | 0.007 | 0.007 | 0.004 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.032 | 0.035 | 0.038 | 0.038 | 0.033 | 0.030 | 0.034 | 0.041 | 0.019 |
| CORPUS CHRISTI, TX | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.13 | 0.10 | 0.10 | 0.10 | 0.11 | 0.09 | 0.12 | 0.11 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 76 | 74 | 63 | 70 | 59 | 74 | 53 | 40 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 28 | 30 | 27 | 31 | 29 | 29 | 28 | 23 |
| SO ₂ | ARITHMETIC MEAN | NS | 2 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.017 | 0.025 | 0.019 | 0.013 | 0.027 | 0.018 | 0.024 | 0.012 | 0.016 |
| CUMBERLAND, MD-WV | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.012 | 0.013 | 0.011 | 0.010 | 0.009 | 0.006 | 0.008 | 0.010 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.044 | 0.055 | 0.049 | 0.031 | 0.028 | 0.024 | 0.027 | 0.037 | 0.015 |
| DALLAS, TX | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.7 | 8.0 | 4.5 | 4.7 | 3.8 | 5.6 | 5.4 | 5.3 | 5.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 11 | 0.25 | 0.23 | 0.24 | 0.21 | 0.16 | 0.16 | 0.16 | 0.10 | 0.11 |
| NO ₂ | ARITHMETIC MEAN | UP | 1 | 0.014 | 0.014 | 0.012 | 0.012 | 0.013 | 0.015 | 0.014 | 0.016 | 0.019 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.13 | 0.13 | 0.13 | 0.14 | 0.10 | 0.12 | 0.13 | 0.12 | 0.14 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 5 | — | 57 | 58 | 60 | 57 | 54 | 62 | 51 | 66 |
| | WEIGHTED ANNUAL MEAN | NS | 5 | — | 29 | 29 | 28 | 26 | 26 | 27 | 26 | 30 |
| DANBURY, CT | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.15 | 0.20 | 0.13 | 0.15 | 0.14 | 0.12 | 0.14 | 0.13 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 60 | 48 | 44 | 53 | 57 | 46 | 48 | 52 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 26 | 25 | 22 | 26 | 22 | 19 | 26 | 22 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.008 | 0.009 | 0.008 | 0.007 | 0.008 | 0.007 | 0.006 | 0.006 | 0.004 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.035 | 0.051 | 0.036 | 0.033 | 0.032 | 0.027 | 0.024 | 0.037 | 0.020 |
| DAVENPORT-MOLINE-ROCK ISLAND, IA-IL | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.03 | 0.01 | 0.02 | 0.03 | 0.01 | 0.02 | 0.02 | 0.01 | 0.02 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.11 | 0.10 | 0.08 | 0.09 | 0.10 | 0.08 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 72 | 75 | 71 | 57 | 59 | 62 | 74 | 78 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 33 | 32 | 31 | 30 | 29 | 28 | 32 | 34 |
| SO ₂ | ARITHMETIC MEAN | NS | 3 | 0.004 | 0.004 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 3 | 0.018 | 0.023 | 0.025 | 0.022 | 0.020 | 0.019 | 0.018 | 0.023 | 0.017 |
| DAYTON-SPRINGFIELD, OH | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 5.0 | 4.0 | 4.8 | 3.2 | 3.5 | 3.6 | 3.6 | 3.4 | 3.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.09 | 0.08 | 0.06 | 0.05 | 0.04 | 0.04 | 0.06 | 0.04 | 0.05 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.12 | 0.13 | 0.12 | 0.11 | 0.11 | 0.10 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 74 | 70 | 64 | 53 | 52 | 58 | 56 | 54 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 31 | 30 | 25 | 28 | 25 | 24 | 24 | 23 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 | 0.006 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.030 | 0.026 | 0.031 | 0.023 | 0.022 | 0.020 | 0.031 | 0.032 | 0.016 |
| DECATUR, AL | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 57 | 57 | 57 | 68 | 48 | 60 | 45 | 52 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 25 | 25 | 25 | 28 | 25 | 25 | 22 | 21 |
| DECATUR, IL | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.09 | 0.10 | 0.07 | 0.03 | 0.03 | 0.03 | 0.03 | 0.05 | 0.03 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.11 | 0.09 | 0.09 | 0.10 | 0.09 | 0.08 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 99 | 110 | 101 | 85 | 75 | 64 | 66 | 58 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 40 | 40 | 34 | 36 | 38 | 28 | 29 | 30 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.013 | 0.015 | 0.012 | 0.008 | 0.007 | 0.005 | 0.006 | 0.007 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.081 | 0.162 | 0.108 | 0.060 | 0.039 | 0.023 | 0.025 | 0.030 | 0.024 |
| DENVER, CO | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 6 | 12.1 | 9.9 | 7.8 | 7.2 | 7.0 | 8.3 | 6.6 | 6.1 | 5.6 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.09 | 0.07 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.04 | 0.05 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.034 | 0.033 | 0.033 | 0.032 | 0.032 | 0.032 | 0.027 | 0.032 | 0.029 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 5 | 0.11 | 0.11 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 10 | — | 66 | 79 | 67 | 75 | 71 | 92 | 66 | 54 |
| | WEIGHTED ANNUAL MEAN | DOWN | 10 | — | 30 | 30 | 28 | 28 | 29 | 32 | 27 | 24 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.007 | 0.006 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.021 | 0.022 | 0.023 | 0.020 | 0.026 | 0.038 | 0.025 | 0.025 | 0.016 |
| DES MOINES, IA | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 3 | 4.7 | 3.9 | 4.4 | 4.6 | 4.6 | 3.9 | 4.5 | 3.9 | 4.0 |
| OZONE | SECOND DAILY MAX 1-HOUR | UP | 2 | 0.05 | 0.06 | 0.06 | 0.07 | 0.06 | 0.08 | 0.08 | 0.07 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 83 | 87 | 89 | 66 | 81 | 77 | 90 | 89 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 35 | 33 | 32 | 29 | 28 | 29 | 30 | 31 |
| DETROIT, MI | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 6 | 6.6 | 5.4 | 6.0 | 4.5 | 5.1 | 4.2 | 4.5 | 6.6 | 4.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.07 | 0.06 | 0.06 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.023 | 0.023 | 0.025 | 0.024 | 0.022 | 0.021 | 0.022 | 0.025 | 0.020 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 7 | 0.11 | 0.14 | 0.12 | 0.10 | 0.12 | 0.10 | 0.11 | 0.12 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 6 | — | 92 | 81 | 78 | 73 | 69 | 82 | 90 | 88 | 65 |
| WEIGHTED ANNUAL MEAN | | NS | 6 | — | 38 | 39 | 36 | 33 | 28 | 33 | 38 | 35 | 31 |
| SO2 | ARITHMETIC MEAN | DOWN | 9 | 0.010 | 0.010 | 0.010 | 0.010 | 0.008 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 |
| SECOND MAX 24-HOUR | | DOWN | 9 | 0.040 | 0.040 | 0.037 | 0.038 | 0.033 | 0.030 | 0.030 | 0.031 | 0.029 | 0.035 |
| DOOTHAN, AL | SECOND MAX 24-HOUR | NS | 1 | — | 47 | 47 | 70 | 62 | 63 | 59 | 63 | 56 | 54 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 26 | 26 | 31 | 28 | 25 | 26 | 28 | 28 | 22 |
| DOVER, DE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.15 | 0.17 | 0.12 | 0.10 | 0.10 | 0.08 | 0.11 | 0.10 | 0.10 | 0.10 |
| DUBUQUE, IA | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 | 0.003 | 0.005 | 0.006 | 0.003 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.028 | 0.052 | 0.030 | 0.037 | 0.028 | 0.029 | 0.014 | 0.037 | 0.027 | 0.022 |
| DULUTH-SUPERIOR, MN-WI | SECOND MAX 8-HOUR | NS | 1 | 8.5 | 5.1 | 9.9 | 4.4 | 5.2 | 4.0 | 4.1 | 4.3 | 4.5 | 4.5 |
| CO | SECOND MAX 24-HOUR | DOWN | 6 | — | 68 | 52 | 55 | 51 | 48 | 37 | 41 | 46 | 46 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 27 | 26 | 22 | 23 | 20 | 19 | 19 | 19 | 19 |
| EL PASO, TX | SECOND MAX 8-HOUR | DOWN | 5 | 10.0 | 9.1 | 9.8 | 10.9 | 9.1 | 8.1 | 8.0 | 6.6 | 6.8 | 8.4 |
| CO | MAX QUARTERLY MEAN | DOWN | 4 | 0.32 | 0.26 | 0.30 | 0.27 | 0.27 | 0.19 | 0.18 | 0.12 | 0.13 | 0.20 |
| LEAD | ARITHMETIC MEAN | NS | 1 | 0.023 | 0.021 | 0.022 | 0.017 | 0.019 | 0.021 | 0.021 | 0.023 | 0.023 | 0.023 |
| NO2 | SECOND DAILY MAX 1-HOUR | DOWN | 3 | 0.16 | 0.14 | 0.13 | 0.12 | 0.12 | 0.12 | 0.11 | 0.13 | 0.11 | 0.12 |
| OZONE | SECOND MAX 24-HOUR | NS | 6 | — | 116 | 109 | 104 | 71 | 85 | 58 | 82 | 88 | 84 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 47 | 42 | 36 | 30 | 30 | 27 | 28 | 31 | 30 |
| SO2 | ARITHMETIC MEAN | DOWN | 3 | 0.015 | 0.014 | 0.013 | 0.010 | 0.010 | 0.012 | 0.009 | 0.007 | 0.008 | 0.008 |
| SECOND MAX 24-HOUR | | DOWN | 3 | 0.066 | 0.059 | 0.055 | 0.055 | 0.047 | 0.053 | 0.049 | 0.029 | 0.038 | 0.036 |
| ELMIRA, NY | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.12 | 0.09 | 0.10 | 0.10 | 0.09 | 0.09 | 0.08 | 0.09 | 0.09 |
| OZONE | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.007 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 1 | 0.029 | 0.027 | 0.026 | 0.021 | 0.022 | 0.021 | 0.019 | 0.023 | 0.014 | 0.016 |
| ERIE, PA | SECOND MAX 8-HOUR | DOWN | 1 | 5.3 | 4.9 | 4.4 | 5.1 | 3.8 | 3.6 | 4.4 | 3.7 | 3.2 | 3.2 |
| CO | ARITHMETIC MEAN | NS | 1 | 0.016 | 0.016 | 0.015 | 0.015 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 | 0.015 |
| NO2 | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.15 | 0.15 | 0.12 | 0.10 | 0.11 | 0.10 | 0.11 | 0.10 | 0.11 | 0.10 |
| OZONE | SECOND MAX 24-HOUR | NS | 1 | — | 87 | 73 | 71 | 68 | 56 | 59 | 54 | 94 | 94 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 35 | 27 | 27 | 29 | 22 | 26 | 29 | 29 | 29 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.014 | 0.014 | 0.014 | 0.014 | 0.010 | 0.011 | 0.011 | 0.010 | 0.009 | 0.011 |
| SECOND MAX 24-HOUR | | NS | 1 | 0.050 | 0.050 | 0.074 | 0.057 | 0.044 | 0.056 | 0.072 | 0.076 | 0.050 | 0.066 |
| EUGENE-SPRINGFIELD, OR | SECOND MAX 8-HOUR | DOWN | 1 | 6.9 | 7.1 | 6.0 | 4.8 | 5.4 | 6.0 | 4.7 | 5.3 | 4.7 | 4.6 |
| CO | MAX QUARTERLY MEAN | NS | 1 | 0.08 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| LEAD | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.12 | 0.08 | 0.09 | 0.09 | 0.10 | 0.08 | 0.09 | 0.08 | 0.11 |
| OZONE | SECOND MAX 24-HOUR | DOWN | 4 | — | 102 | 104 | 87 | 117 | 92 | 91 | 85 | 75 | 61 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 35 | 31 | 28 | 33 | 29 | 29 | 25 | 23 | 20 |
| EVANSVILLE-HENDERSON, IN-KY | SECOND MAX 8-HOUR | NS | 1 | 2.5 | 3.1 | 2.3 | 2.5 | 2.0 | 2.3 | 2.6 | 2.7 | 2.7 | 2.0 |
| CO | ARITHMETIC MEAN | DOWN | 1 | 0.021 | 0.022 | 0.020 | 0.018 | 0.021 | 0.018 | 0.017 | 0.018 | 0.017 | 0.017 |
| NO2 | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.11 | 0.12 | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 | 0.10 |
| OZONE | SECOND MAX 24-HOUR | DOWN | 3 | — | 82 | 81 | 79 | 63 | 54 | 68 | 76 | 70 | 46 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 38 | 36 | 32 | 34 | 30 | 30 | 33 | 32 | 26 |
| SO2 | ARITHMETIC MEAN | DOWN | 8 | 0.011 | 0.012 | 0.014 | 0.013 | 0.013 | 0.012 | 0.012 | 0.012 | 0.010 | 0.010 |
| SECOND MAX 24-HOUR | | NS | 8 | 0.060 | 0.062 | 0.060 | 0.062 | 0.065 | 0.069 | 0.051 | 0.048 | 0.042 | 0.047 |
| FARGO-MOORHEAD, ND-MN | SECOND MAX 24-HOUR | NS | 1 | — | 45 | 46 | 63 | 45 | 54 | 39 | 39 | 40 | 40 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 21 | 21 | 21 | 19 | 21 | 18 | 18 | 20 | 20 |
| FAYETTEVILLE-SPRINGDALE-ROGERS, AR | SECOND MAX 24-HOUR | NS | 1 | — | 58 | 58 | 59 | 46 | 53 | 58 | 49 | 46 | 48 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 26 | 26 | 23 | 24 | 22 | 24 | 25 | 24 | 23 |
| FAYETTEVILLE, NC | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.11 |
| OZONE | SECOND MAX 24-HOUR | NS | 1 | — | 73 | 52 | 56 | 52 | 44 | 55 | 44 | 38 | 53 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 33 | 29 | 31 | 27 | 26 | 27 | 25 | 23 | 26 |
| FLINT, MI | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.13 | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | 0.09 | 0.10 |
| FLORENCE, AL | SECOND MAX 24-HOUR | NS | 1 | — | 56 | 56 | 56 | 57 | 40 | 52 | 39 | 49 | 46 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 24 | 24 | 24 | 24 | 21 | 23 | 20 | 22 | 18 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.007 | 0.007 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 |
| SECOND MAX 24-HOUR | | DOWN | 1 | 0.071 | 0.050 | 0.036 | 0.027 | 0.025 | 0.019 | 0.022 | 0.022 | 0.018 | 0.019 |
| FORT COLLINS-LOVELAND, CO | SECOND MAX 8-HOUR | DOWN | 1 | 12.8 | 11.3 | 8.3 | 7.0 | 9.8 | 6.9 | 6.6 | 6.0 | 5.2 | 5.1 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.09 | 0.10 | 0.09 | 0.08 | 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 83 | 59 | 45 | 58 | 39 | 54 | 45 | 47 | 52 |
| WEIGHTED ANNUAL MEAN | | DOWN | 1 | — | 28 | 29 | 23 | 25 | 23 | 22 | 22 | 22 | 20 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FORT LAUDERDALE, FL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 4 | 4.3 | 3.5 | 4.4 | 3.4 | 3.6 | 4.0 | 3.6 | 3.5 | 3.5 | 3.0 |
| LEAD | MAX QUARTERLY MEAN | NS | 2 | 0.04 | 0.04 | 0.04 | 0.03 | 0.02 | 0.06 | 0.03 | 0.03 | 0.02 | 0.04 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.12 | 0.12 | 0.11 | 0.10 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | UP | 1 | — | 42 | 36 | 29 | 42 | 42 | 66 | 50 | 50 | 50 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 22 | 21 | 17 | 18 | 18 | 19 | 24 | 24 | 24 |
| FORT MYERS-CAPE CORAL, FL | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.10 | 0.10 | 0.10 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.07 |
| FORT SMITH, AR-OK | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 46 | 46 | 55 | 47 | 51 | 60 | 44 | 56 | 47 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 28 | 28 | 26 | 25 | 24 | 25 | 24 | 26 | 25 |
| FORT WAYNE, IN | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.12 | 0.12 | 0.09 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 64 | 64 | 64 | 55 | 45 | 61 | 47 | 53 | 34 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 29 | 29 | 27 | 27 | 23 | 23 | 24 | 24 | 17 |
| FORTWORTH-ARLINGTON, TX | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 5.1 | 5.1 | 4.8 | 4.2 | 3.7 | 4.0 | 3.4 | 3.2 | 3.2 | 3.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.08 | 0.05 | 0.03 | 0.03 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.015 | 0.014 | 0.013 | 0.012 | 0.014 | 0.015 | 0.013 | 0.017 | 0.017 | 0.015 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.13 | 0.14 | 0.13 | 0.14 | 0.15 | 0.12 | 0.11 | 0.13 | 0.14 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 54 | 50 | 49 | 45 | 51 | 58 | 40 | 52 | 49 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 25 | 24 | 24 | 23 | 21 | 21 | 20 | 24 | 25 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.002 | 0.002 | 0.001 | 0.002 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.001 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.010 | 0.010 | 0.007 | 0.008 | 0.006 | 0.013 | 0.005 | 0.006 | 0.004 | 0.011 |
| FRESNO, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 4.0 | 5.0 | 4.8 | 4.9 | 5.4 | 3.9 | 3.4 | 4.3 | 3.5 | 3.2 |
| NO ₂ | ARITHMETIC MEAN | NS | 2 | 0.017 | 0.021 | 0.022 | 0.021 | 0.021 | 0.020 | 0.020 | 0.020 | 0.019 | 0.019 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.16 | 0.16 | 0.14 | 0.14 | 0.15 | 0.14 | 0.14 | 0.12 | 0.13 | 0.14 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 153 | 153 | 153 | 120 | 87 | 114 | 100 | 104 | 72 |
| | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 53 | 53 | 53 | 52 | 43 | 43 | 39 | 39 | 34 |
| GADSDEN, AL | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 70 | 52 | 61 | 80 | 59 | 76 | 54 | 62 | 49 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 36 | 28 | 33 | 32 | 31 | 33 | 30 | 30 | 23 |
| GALVESTON-TEXAS CITY, TX | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.04 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.13 | 0.14 | 0.14 | 0.15 | 0.15 | 0.10 | 0.18 | 0.13 | 0.20 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 54 | 59 | 49 | 43 | 52 | 62 | 47 | 62 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 27 | 28 | 24 | 22 | 24 | 24 | 23 | 25 | 19 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.006 | 0.007 | 0.008 | 0.007 | 0.007 | 0.005 | 0.005 | 0.006 | 0.006 | 0.014 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.053 | 0.049 | 0.045 | 0.063 | 0.050 | 0.039 | 0.056 | 0.052 | 0.089 | 0.067 |
| GARY, IN | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.5 | 4.2 | 4.0 | 3.8 | 4.6 | 4.2 | 5.0 | 4.6 | 3.7 | 2.8 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.91 | 0.47 | 0.23 | 0.21 | 0.11 | 0.11 | 0.08 | 0.17 | 0.12 | 0.13 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.13 | 0.15 | 0.10 | 0.10 | 0.11 | 0.11 | 0.09 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 8 | — | 91 | 74 | 82 | 68 | 59 | 56 | 57 | 53 | 45 |
| | WEIGHTED ANNUAL MEAN | DOWN | 8 | — | 35 | 33 | 33 | 29 | 26 | 24 | 26 | 25 | 21 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 5 | 0.011 | 0.010 | 0.011 | 0.010 | 0.008 | 0.007 | 0.007 | 0.006 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 5 | 0.041 | 0.052 | 0.047 | 0.048 | 0.028 | 0.028 | 0.032 | 0.032 | 0.022 | 0.023 |
| GLENS FALLS, NY | | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.005 | 0.004 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.029 | 0.040 | 0.023 | 0.040 | 0.020 | 0.017 | 0.018 | 0.027 | 0.011 | 0.013 |
| GRAND FORKS, ND-MN | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 53 | 53 | 104 | 57 | 57 | 38 | 36 | 40 | 28 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 24 | 24 | 25 | 20 | 18 | 17 | 16 | 18 | 15 |
| GRAND RAPIDS-MUSKEGON-HOLLAND, MI | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.9 | 4.1 | 4.5 | 3.5 | 4.0 | 3.2 | 3.2 | 4.0 | 4.6 | 3.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.09 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.13 | 0.14 | 0.12 | 0.12 | 0.12 | 0.10 | 0.09 | 0.10 | 0.12 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 64 | 60 | 69 | 62 | 122 | 65 | 68 | 52 | 43 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 28 | 29 | 30 | 26 | 35 | 22 | 27 | 21 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.017 | 0.016 | 0.016 | 0.012 | 0.014 | 0.015 | 0.012 | 0.013 | 0.011 | 0.011 |
| GREAT FALLS, MT | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 65 | 65 | 61 | 72 | 53 | 61 | 48 | 52 | 59 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 20 | 20 | 24 | 21 | 21 | 21 | 21 | 18 | 19 |
| GREELEY, CO | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 10.5 | 9.2 | 7.3 | 7.1 | 7.8 | 7.5 | 5.8 | 5.2 | 5.3 | 7.0 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.09 | 0.10 | 0.10 | 0.11 | 0.10 | 0.08 | 0.09 | 0.09 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 83 | 73 | 66 | 80 | 60 | 99 | 57 | 59 | 56 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 40 | 30 | 25 | 26 | 25 | 23 | 23 | 20 | 18 |
| GREEN BAY, WI | | | | | | | | | | | | | |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.007 | 0.006 | 0.005 | 0.005 | 0.004 | 0.003 | 0.003 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.045 | 0.039 | 0.024 | 0.020 | 0.042 | 0.021 | 0.018 | 0.015 | 0.017 | 0.011 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GREENSBORO—WINSTON-SALEM—HIGH POINT, N | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 9.7 | 9.7 | 9.7 | 6.8 | 6.6 | 5.7 | 5.5 | 6.0 | 6.2 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.018 | 0.018 | 0.016 | 0.017 | 0.016 | 0.015 | 0.017 | 0.017 | 0.016 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.12 | 0.14 | 0.10 | 0.12 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 5 | — | 69 | 66 | 60 | 61 | 51 | 57 | 43 | 46 |
| | WEIGHTED ANNUAL MEAN | DOWN | 5 | — | 34 | 33 | 32 | 31 | 27 | 28 | 25 | 26 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.007 | 0.007 | 0.007 | 0.008 | 0.007 | 0.006 | 0.006 | 0.007 | 0.007 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.028 | 0.031 | 0.024 | 0.023 | 0.027 | 0.019 | 0.022 | 0.021 | 0.025 |
| GREENVILLE-SPARTANBURG-ANDERSON, SC | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.02 | 0.02 | 0.02 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.13 | 0.10 | 0.09 | 0.10 | 0.10 | 0.11 | 0.10 | 0.11 |
| GREENVILLE, NC | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.12 | 0.10 | 0.10 | 0.09 | 0.10 | 0.11 | 0.09 | 0.10 |
| HAMILTON-MIDDLETOWN, OH | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.13 | 0.11 | 0.12 | 0.11 | 0.10 | 0.12 | 0.11 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 76 | 76 | 76 | 53 | 50 | 73 | 55 | 77 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 27 | 27 | 27 | 33 | 27 | 29 | 27 | 29 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.010 | 0.010 | 0.010 | 0.010 | 0.009 | 0.007 | 0.008 | 0.008 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.041 | 0.041 | 0.040 | 0.037 | 0.040 | 0.033 | 0.035 | 0.038 | 0.019 |
| HARRISBURG-LEBANON-CARLISLE, PA | | | | | | | | | | | | |
| NO ₂ | ARITHMETIC MEAN | NS | 2 | 0.014 | 0.014 | 0.014 | 0.013 | 0.014 | 0.013 | 0.011 | 0.015 | 0.014 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.12 | 0.14 | 0.10 | 0.11 | 0.11 | 0.09 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 74 | 61 | 52 | 52 | 36 | 62 | 68 | 60 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 27 | 25 | 23 | 25 | 21 | 24 | 27 | 24 |
| SO ₂ | ARITHMETIC MEAN | NS | 2 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 | 0.005 | 0.006 | 0.007 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.026 | 0.024 | 0.029 | 0.021 | 0.021 | 0.022 | 0.021 | 0.035 | 0.017 |
| HARTFORD, CT | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 7.5 | 8.3 | 6.7 | 6.7 | 6.1 | 6.1 | 5.6 | 6.4 | 5.8 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.020 | 0.020 | 0.020 | 0.019 | 0.020 | 0.017 | 0.018 | 0.020 | 0.017 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.14 | 0.17 | 0.15 | 0.15 | 0.16 | 0.12 | 0.15 | 0.13 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 7 | — | 51 | 47 | 47 | 52 | 51 | 41 | 50 | 39 |
| | WEIGHTED ANNUAL MEAN | DOWN | 7 | — | 23 | 23 | 20 | 23 | 20 | 18 | 20 | 16 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.008 | 0.009 | 0.009 | 0.008 | 0.007 | 0.006 | 0.005 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.040 | 0.044 | 0.042 | 0.034 | 0.032 | 0.027 | 0.020 | 0.029 | 0.019 |
| HONOLULU, HI | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 3.7 | 3.3 | 3.4 | 2.9 | 2.6 | 2.8 | 3.1 | 3.1 | 2.5 |
| LEAD | MAX QUARTERLY MEAN | NS | 2 | 0.02 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.04 | 0.03 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.05 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 26 | 26 | 34 | 35 | 25 | 23 | 28 | 25 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 16 | 16 | 16 | 17 | 17 | 16 | 19 | 16 |
| HOUMA, LA | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.11 | 0.11 | 0.12 | 0.10 | 0.09 | 0.10 | 0.10 | 0.14 |
| HOUSTON, TX | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 4 | 6.7 | 6.5 | 5.8 | 6.8 | 6.0 | 6.8 | 5.6 | 4.9 | 4.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.06 | 0.06 | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.00 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.024 | 0.023 | 0.022 | 0.023 | 0.022 | 0.022 | 0.019 | 0.021 | 0.020 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 10 | 0.17 | 0.18 | 0.18 | 0.19 | 0.17 | 0.16 | 0.16 | 0.15 | 0.17 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 7 | — | 63 | 63 | 65 | 64 | 70 | 68 | 61 | 64 |
| | WEIGHTED ANNUAL MEAN | DOWN | 7 | — | 33 | 33 | 33 | 32 | 31 | 30 | 31 | 30 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 7 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | NS | 7 | 0.022 | 0.027 | 0.026 | 0.025 | 0.025 | 0.022 | 0.020 | 0.018 | 0.026 |
| HUNTINGTON-ASHLAND, WV-KY-OH | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.5 | 3.9 | 5.5 | 4.7 | 4.4 | 4.1 | 3.8 | 5.2 | 3.8 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.09 | 0.13 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 | 0.04 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.14 | 0.12 | 0.11 | 0.12 | 0.09 | 0.11 | 0.13 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 87 | 85 | 70 | 59 | 62 | 59 | 61 | 61 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 37 | 35 | 35 | 33 | 30 | 29 | 32 | 28 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 7 | 0.017 | 0.016 | 0.014 | 0.013 | 0.012 | 0.010 | 0.011 | 0.010 | 0.009 |
| | SECOND MAX 24-HOUR | DOWN | 7 | 0.087 | 0.091 | 0.080 | 0.075 | 0.051 | 0.044 | 0.053 | 0.048 | 0.036 |
| HUNTSVILLE, AL | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.0 | 5.0 | 5.2 | 4.2 | 4.1 | 4.2 | 4.0 | 3.5 | 3.6 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.13 | 0.09 | 0.09 | 0.11 | 0.11 | 0.11 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 58 | 58 | 65 | 65 | 50 | 56 | 46 | 43 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 31 | 31 | 30 | 28 | 30 | 23 | 21 | 22 |
| INDIANAPOLIS, IN | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.56 | 0.68 | 0.53 | 0.68 | 0.30 | 0.26 | 0.11 | 0.20 | 0.06 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 5 | 0.11 | 0.13 | 0.11 | 0.10 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 14 | — | 72 | 73 | 76 | 63 | 56 | 63 | 63 | 60 |
| | WEIGHTED ANNUAL MEAN | DOWN | 14 | — | 34 | 36 | 33 | 31 | 28 | 28 | 28 | 23 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 8 | 0.011 | 0.011 | 0.011 | 0.009 | 0.008 | 0.008 | 0.009 | 0.007 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 8 | 0.046 | 0.048 | 0.041 | 0.036 | 0.029 | 0.029 | 0.038 | 0.038 | 0.026 |
| JACKSON, MS | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.12 | 0.07 | 0.08 | 0.07 | 0.05 | 0.02 | 0.02 | 0.00 | 0.09 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.09 | 0.09 | 0.08 | 0.10 | 0.09 | 0.08 | 0.09 | 0.09 | 0.09 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---------------------------------------|--|-----------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| JACKSON, TN | PM ₁₀ SECOND MAX 24-HOUR WEIGHTED ANNUAL MEAN | DOWN DOWN | 2 2 | — 32 | 65 31 | 56 28 | 60 27 | 46 27 | 53 23 | 56 23 | 44 23 | 51 25 | 43 22 |
| JACKSONVILLE, FL | CO SECOND MAX 8-HOUR | DOWN | 4 | 5.7 | 5.6 | 5.9 | 4.3 | 3.8 | 3.9 | 4.2 | 3.7 | 3.6 | 3.1 |
| | LEAD MAX QUARTERLY MEAN | DOWN | 2 | 0.12 | 0.06 | 0.04 | 0.04 | 0.03 | 0.02 | 0.05 | 0.02 | 0.03 | 0.02 |
| | NO ₂ ARITHMETIC MEAN | NS | 1 | 0.018 | 0.019 | 0.015 | 0.015 | 0.014 | 0.014 | 0.015 | 0.014 | 0.016 | 0.015 |
| | OZONE SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.11 | 0.11 | 0.11 | 0.09 | 0.10 | 0.11 | 0.10 | 0.11 | 0.09 |
| | PM ₁₀ SECOND MAX 24-HOUR | NS | 3 | — | 59 | 59 | 59 | 54 | 47 | 60 | 49 | 53 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 34 | 36 | 34 | 32 | 26 | 27 | 26 | 27 | 24 |
| | SO ₂ ARITHMETIC MEAN | DOWN | 5 | 0.004 | 0.005 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 5 | 0.038 | 0.041 | 0.035 | 0.037 | 0.023 | 0.023 | 0.025 | 0.030 | 0.019 | 0.020 |
| JAMESTOWN, NY | SO ₂ ARITHMETIC MEAN | DOWN | 1 | 0.013 | 0.014 | 0.014 | 0.012 | 0.013 | 0.011 | 0.011 | 0.010 | 0.009 | 0.008 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.066 | 0.054 | 0.072 | 0.065 | 0.048 | 0.050 | 0.049 | 0.072 | 0.056 | 0.039 |
| JERSEY CITY, NJ | CO SECOND MAX 8-HOUR | DOWN | 1 | 8.0 | 7.8 | 7.3 | 7.2 | 7.5 | 6.0 | 5.6 | 5.9 | 6.2 | 4.9 |
| | LEAD MAX QUARTERLY MEAN | DOWN | 2 | 0.10 | 0.11 | 0.07 | 0.05 | 0.06 | 0.04 | 0.04 | 0.03 | 0.04 | 0.04 |
| | NO ₂ ARITHMETIC MEAN | DOWN | 1 | 0.031 | 0.033 | 0.031 | 0.030 | 0.028 | 0.028 | 0.027 | 0.026 | 0.026 | 0.027 |
| | OZONE SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.16 | 0.20 | 0.12 | 0.18 | 0.14 | 0.11 | 0.13 | 0.12 | 0.13 | 0.12 |
| | PM ₁₀ SECOND MAX 24-HOUR | NS | 4 | — | 71 | 73 | 74 | 68 | 58 | 67 | 90 | 64 | 56 |
| | WEIGHTED ANNUAL MEAN | NS | 4 | — | 31 | 32 | 31 | 32 | 26 | 27 | 31 | 25 | 26 |
| | SO ₂ ARITHMETIC MEAN | DOWN | 2 | 0.012 | 0.015 | 0.014 | 0.013 | 0.012 | 0.010 | 0.009 | 0.009 | 0.007 | 0.008 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.041 | 0.059 | 0.047 | 0.043 | 0.035 | 0.041 | 0.030 | 0.036 | 0.026 | 0.027 |
| JOHNSON CITY-KINGSPORT-BRISTOL, TN-VA | CO SECOND MAX 8-HOUR | DOWN | 1 | 4.8 | 4.3 | 3.7 | 3.4 | 3.3 | 3.0 | 6.5 | 3.4 | 3.0 | 3.0 |
| | NO ₂ ARITHMETIC MEAN | DOWN | 1 | 0.020 | 0.019 | 0.019 | 0.019 | 0.019 | 0.018 | 0.017 | 0.017 | 0.018 | 0.018 |
| | OZONE SECOND DAILY MAX 1-HOUR | NS | 1 | 0.09 | 0.12 | 0.11 | 0.12 | 0.12 | 0.10 | 0.13 | 0.10 | 0.11 | 0.10 |
| | PM ₁₀ SECOND MAX 24-HOUR | DOWN | 3 | — | 68 | 68 | 59 | 67 | 57 | 73 | 53 | 58 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 31 | 31 | 32 | 32 | 29 | 29 | 28 | 27 | 26 |
| | SO ₂ ARITHMETIC MEAN | DOWN | 3 | 0.010 | 0.011 | 0.010 | 0.009 | 0.009 | 0.009 | 0.008 | 0.009 | 0.008 | 0.009 |
| | SECOND MAX 24-HOUR | NS | 3 | 0.046 | 0.049 | 0.053 | 0.044 | 0.044 | 0.039 | 0.042 | 0.045 | 0.039 | 0.044 |
| JOHNSTOWN, PA | CO SECOND MAX 8-HOUR | NS | 1 | 5.6 | 4.3 | 4.1 | 3.7 | 4.8 | 4.4 | 4.2 | 4.1 | 3.5 | 4.8 |
| | LEAD MAX QUARTERLY MEAN | DOWN | 1 | 0.52 | 0.30 | 0.31 | 0.16 | 0.19 | 0.14 | 0.06 | 0.05 | 0.06 | 0.06 |
| | NO ₂ ARITHMETIC MEAN | DOWN | 1 | 0.020 | 0.019 | 0.019 | 0.018 | 0.019 | 0.018 | 0.017 | 0.018 | 0.015 | 0.018 |
| | OZONE SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.14 | 0.10 | 0.10 | 0.11 | 0.09 | 0.10 | 0.09 | 0.10 | 0.10 |
| | PM ₁₀ SECOND MAX 24-HOUR | NS | 1 | — | 70 | 70 | 58 | 70 | 56 | 63 | 69 | 61 | 61 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 33 | 33 | 28 | 33 | 28 | 27 | 29 | 27 | 27 |
| | SO ₂ ARITHMETIC MEAN | DOWN | 1 | 0.016 | 0.017 | 0.017 | 0.014 | 0.015 | 0.013 | 0.015 | 0.014 | 0.012 | 0.011 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.065 | 0.054 | 0.089 | 0.046 | 0.043 | 0.052 | 0.049 | 0.080 | 0.042 | 0.034 |
| KALAMAZOO-BATTLE CREEK, MI | PM ₁₀ SECOND MAX 24-HOUR | DOWN | 1 | — | 108 | 73 | 69 | 72 | 57 | 59 | 57 | 55 | 57 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 38 | 34 | 28 | 29 | 27 | 24 | 26 | 26 | 22 |
| KANSAS CITY, MO-KS | CO SECOND MAX 8-HOUR | DOWN | 5 | 5.4 | 4.4 | 4.6 | 4.4 | 3.8 | 3.5 | 4.1 | 4.3 | 3.4 | 3.3 |
| | LEAD MAX QUARTERLY MEAN | DOWN | 5 | 0.16 | 0.17 | 0.06 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 |
| | NO ₂ ARITHMETIC MEAN | NS | 3 | 0.013 | 0.010 | 0.011 | 0.011 | 0.010 | 0.010 | 0.009 | 0.010 | 0.010 | 0.012 |
| | OZONE SECOND DAILY MAX 1-HOUR | NS | 6 | 0.11 | 0.13 | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.10 | 0.12 | 0.10 |
| | PM ₁₀ SECOND MAX 24-HOUR | NS | 8 | — | 65 | 71 | 67 | 60 | 60 | 61 | 59 | 60 | 72 |
| | WEIGHTED ANNUAL MEAN | NS | 8 | — | 32 | 33 | 30 | 30 | 29 | 29 | 29 | 24 | 31 |
| | SO ₂ ARITHMETIC MEAN | NS | 5 | 0.006 | 0.005 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 |
| | SECOND MAX 24-HOUR | NS | 5 | 0.026 | 0.022 | 0.016 | 0.022 | 0.017 | 0.016 | 0.020 | 0.025 | 0.018 | 0.024 |
| KENOSHA, WI | OZONE SECOND DAILY MAX 1-HOUR | NS | 2 | 0.19 | 0.19 | 0.13 | 0.11 | 0.14 | 0.11 | 0.11 | 0.12 | 0.12 | 0.13 |
| KNOXVILLE, TN | CO SECOND MAX 8-HOUR | DOWN | 1 | 6.1 | 6.1 | 6.7 | 5.1 | 4.5 | 4.5 | 4.6 | 4.3 | 4.1 | 3.3 |
| | OZONE SECOND DAILY MAX 1-HOUR | NS | 4 | 0.10 | 0.12 | 0.09 | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 |
| | PM ₁₀ SECOND MAX 24-HOUR | NS | 8 | — | 64 | 61 | 64 | 63 | 54 | 61 | 56 | 58 | 62 |
| | WEIGHTED ANNUAL MEAN | DOWN | 8 | — | 33 | 32 | 32 | 34 | 30 | 30 | 32 | 31 | 31 |
| | SO ₂ ARITHMETIC MEAN | UP | 2 | 0.006 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| | SECOND MAX 24-HOUR | UP | 2 | 0.029 | 0.032 | 0.031 | 0.033 | 0.039 | 0.035 | 0.041 | 0.042 | 0.038 | 0.047 |
| LAKE CHARLES, LA | OZONE SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.13 | 0.13 | 0.12 | 0.11 | 0.12 | 0.11 | 0.10 | 0.10 | 0.11 | 0.09 |
| | PM ₁₀ SECOND MAX 24-HOUR | NS | 1 | — | 44 | 44 | 44 | 52 | 75 | 51 | 46 | 54 | 33 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 21 | 21 | 21 | 23 | 25 | 22 | 23 | 23 | 18 |
| LAKELAND-WINTER HAVEN, FL | SO ₂ ARITHMETIC MEAN | NS | 1 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.005 | 0.006 | |
| | SECOND MAX 24-HOUR | NS | 1 | 0.019 | 0.018 | 0.016 | 0.022 | 0.016 | 0.018 | 0.019 | 0.016 | 0.014 | 0.021 |
| LANCASTER, PA | CO SECOND MAX 8-HOUR | NS | 1 | 3.3 | 3.4 | 4.1 | 3.4 | 2.6 | 2.6 | 3.0 | 3.8 | 2.4 | 2.6 |
| | LEAD MAX QUARTERLY MEAN | DOWN | 1 | 0.09 | 0.07 | 0.05 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| | NO ₂ ARITHMETIC MEAN | NS | 1 | 0.019 | 0.020 | 0.018 | 0.017 | 0.018 | 0.015 | 0.015 | 0.019 | 0.016 | 0.017 |
| | OZONE SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.13 | 0.10 | 0.10 | 0.12 | 0.11 | 0.12 | 0.11 | 0.12 | 0.10 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 59 | 59 | 59 | 51 | 45 | 68 | 117 | 73 | 63 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 31 | 31 | 31 | 30 | 27 | 31 | 38 | 33 | 31 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.007 | 0.006 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.027 | 0.028 | 0.037 | 0.028 | 0.023 | 0.023 | 0.026 | 0.030 | 0.018 | 0.021 |
| LANSING-EAST LANSING, MI | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.10 | 0.12 | 0.10 | 0.10 | 0.11 | 0.09 | 0.10 | 0.09 | 0.10 | 0.09 |
| LAS CRUCES, NM | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 5.8 | 5.0 | 4.5 | 4.6 | 5.0 | 3.8 | 6.0 | 4.1 | 3.7 | 3.7 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.20 | 0.18 | 0.16 | 0.17 | 0.15 | 0.13 | 0.12 | 0.05 | 0.09 | 0.07 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 140 | 123 | 93 | 86 | 88 | 77 | 91 | 75 | 78 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 44 | 45 | 35 | 31 | 31 | 30 | 33 | 34 | 33 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.011 | 0.010 | 0.010 | 0.011 | 0.010 | 0.009 | 0.006 | 0.004 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.063 | 0.068 | 0.061 | 0.056 | 0.055 | 0.052 | 0.055 | 0.023 | 0.021 | 0.030 |
| LAS VEGAS, NV-AZ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 9.7 | 11.1 | 10.0 | 10.9 | 9.5 | 7.9 | 8.6 | 8.8 | 7.8 | 8.4 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.028 | 0.031 | 0.034 | 0.037 | 0.030 | 0.028 | 0.029 | 0.027 | 0.027 | 0.027 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 3 | 0.11 | 0.11 | 0.10 | 0.10 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 106 | 155 | 159 | 111 | 89 | 106 | 112 | 102 | 104 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 50 | 65 | 67 | 60 | 47 | 44 | 47 | 47 | 50 |
| LAWRENCE, MA-NH | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.14 | 0.11 | 0.10 | 0.13 | 0.10 | 0.11 | 0.11 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 39 | 39 | 39 | 35 | 48 | 46 | 35 | 28 | 34 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 21 | 21 | 21 | 18 | 19 | 18 | 16 | 13 | 14 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.010 | 0.008 | 0.009 | 0.008 | 0.007 | 0.008 | 0.008 | 0.006 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.043 | 0.031 | 0.036 | 0.029 | 0.026 | 0.027 | 0.026 | 0.027 | 0.025 | 0.019 |
| LAWTON, OK | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 82 | 74 | 73 | 54 | 52 | 55 | 51 | 52 | 56 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 32 | 32 | 30 | 27 | 26 | 27 | 28 | 25 | 28 |
| LEWISTON-AUBURN, ME | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 55 | 55 | 55 | 66 | 58 | 68 | 46 | 46 | 37 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 25 | 25 | 25 | 29 | 24 | 24 | 20 | 20 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.009 | 0.007 | 0.008 | 0.007 | 0.006 | 0.005 | 0.007 | 0.006 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.034 | 0.044 | 0.035 | 0.027 | 0.023 | 0.020 | 0.025 | 0.025 | 0.020 | 0.018 |
| LEXINGTON, KY | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.8 | 5.4 | 5.6 | 3.7 | 4.9 | 3.8 | 6.5 | 4.2 | 3.0 | 3.1 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.017 | 0.018 | 0.019 | 0.017 | 0.016 | 0.016 | 0.017 | 0.016 | 0.017 | 0.014 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.12 | 0.11 | 0.10 | 0.09 | 0.08 | 0.10 | 0.10 | 0.11 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 76 | 76 | 61 | 52 | 52 | 61 | 66 | 65 | 57 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 30 | 30 | 28 | 28 | 24 | 25 | 27 | 26 | 24 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.007 | 0.007 | 0.006 | 0.006 | 0.008 | 0.007 | 0.007 | 0.008 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.031 | 0.027 | 0.034 | 0.020 | 0.025 | 0.030 | 0.026 | 0.037 | 0.016 | 0.020 |
| LIMA, OH | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.006 | 0.006 | 0.005 | 0.006 | 0.004 | 0.005 | 0.004 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.030 | 0.024 | 0.033 | 0.026 | 0.021 | 0.020 | 0.023 | 0.036 | 0.015 | 0.015 |
| LINCOLN, NE | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 6.1 | 6.4 | 6.1 | 6.2 | 7.4 | 4.5 | 4.3 | 4.0 | 4.9 | 3.4 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.06 | 0.08 | 0.06 | 0.07 | 0.07 | 0.07 | 0.06 | 0.08 | 0.07 | 0.06 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 57 | 61 | 58 | 66 | 50 | 51 | 49 | 54 | 61 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 29 | 33 | 29 | 30 | 25 | 26 | 28 | 25 | 28 |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | | | | | | | | | | | | | |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.009 | 0.010 | 0.009 | 0.009 | 0.009 | 0.012 | 0.009 | 0.011 | 0.011 | 0.011 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.11 | 0.09 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 4 | — | 63 | 59 | 60 | 53 | 63 | 55 | 57 | 59 | 50 |
| | WEIGHTED ANNUAL MEAN | NS | 4 | — | 30 | 29 | 29 | 25 | 28 | 27 | 27 | 29 | 26 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.005 | 0.006 | 0.003 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.006 | 0.016 | 0.010 | 0.014 | 0.012 | 0.012 | 0.017 | 0.009 | 0.008 | 0.009 |
| LONGVIEW-MARSHALL, TX | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.12 | 0.10 | 0.13 | 0.11 | 0.10 | 0.11 | 0.10 | 0.15 | 0.11 |
| LOS ANGELES-LONG BEACH, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 12 | 9.4 | 10.5 | 9.9 | 9.1 | 9.0 | 8.0 | 6.9 | 8.3 | 7.7 | 7.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 6 | 0.15 | 0.15 | 0.09 | 0.09 | 0.10 | 0.08 | 0.06 | 0.06 | 0.05 | 0.05 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 12 | 0.045 | 0.048 | 0.046 | 0.042 | 0.043 | 0.040 | 0.038 | 0.041 | 0.039 | 0.037 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 13 | 0.22 | 0.23 | 0.22 | 0.19 | 0.20 | 0.20 | 0.18 | 0.17 | 0.15 | 0.14 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 9 | — | 121 | 124 | 115 | 120 | 92 | 83 | 82 | 106 | 77 |
| | WEIGHTED ANNUAL MEAN | DOWN | 9 | — | 57 | 57 | 49 | 53 | 41 | 40 | 39 | 39 | 38 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.005 | 0.005 | 0.004 | 0.003 | 0.003 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 4 | 0.015 | 0.019 | 0.015 | 0.012 | 0.013 | 0.015 | 0.011 | 0.008 | 0.008 | 0.008 |
| LOUISVILLE, KY-IN | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 6.8 | 5.9 | 6.0 | 5.9 | 5.9 | 4.2 | 4.6 | 5.1 | 3.8 | 3.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.10 | 0.09 | 0.05 | 0.03 | 0.04 | 0.04 | 0.05 | 0.02 | 0.06 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.11 | 0.16 | 0.11 | 0.11 | 0.12 | 0.09 | 0.13 | 0.12 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 84 | 71 | 66 | 61 | 53 | 65 | 63 | 62 | 57 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-----------------------------------|-------------------------|-------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SO2 | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 38 | 35 | 34 | 33 | 30 | 29 | 30 | 29 | 26 |
| | ARITHMETIC MEAN | NS | 4 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 | 0.009 | 0.010 | 0.010 | 0.008 | 0.007 |
| | SECOND MAX 24-HOUR | DOWN | 4 | 0.045 | 0.044 | 0.055 | 0.041 | 0.037 | 0.034 | 0.035 | 0.040 | 0.028 | 0.031 |
| LOWELL, MA-NH | CO | SECOND MAX 8-HOUR | NS | 1 | 6.4 | 6.4 | 5.3 | 7.3 | 5.8 | 5.9 | 5.1 | 6.5 | 7.8 |
| LUBBOCK, TX | PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 100 | 94 | 61 | 79 | 58 | 56 | 81 | 76 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 36 | 34 | 24 | 26 | 22 | 20 | 23 | 21 | 22 |
| LYNCHBURG, VA | PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 64 | 54 | 51 | 53 | 45 | 63 | 40 | 54 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 31 | 30 | 24 | 28 | 24 | 26 | 23 | 24 | 23 |
| MADISON, WI | PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 90 | 90 | 54 | 55 | 39 | 43 | 50 | 55 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 34 | 34 | 24 | 25 | 22 | 21 | 22 | 23 | 20 |
| MANSFIELD, OH | PM ₁₀ | SECOND MAX 24-HOUR | UP | 1 | — | 56 | 56 | 56 | 62 | 68 | 66 | 58 | 61 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 27 | 27 | 27 | 27 | 26 | 28 | 29 | 25 | 24 |
| MEDFORD-ASHLAND, OR | CO | SECOND MAX 8-HOUR | DOWN | 1 | 8.8 | 11.3 | 11.0 | 8.2 | 8.1 | 6.4 | 6.9 | 6.2 | 5.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.07 | 0.05 | 0.04 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 174 | 199 | 123 | 148 | 99 | 91 | 80 | 60 | 65 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 54 | 54 | 42 | 40 | 36 | 35 | 33 | 26 | 24 |
| MELBOURNE-TITUSVILLE-PALM BAY, FL | OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.10 | 0.10 | 0.08 | 0.09 | 0.08 | 0.09 | 0.09 | 0.08 |
| MEMPHIS,TN-AR-MS | CO | SECOND MAX 8-HOUR | DOWN | 5 | 8.8 | 6.4 | 8.2 | 7.5 | 6.1 | 7.7 | 7.6 | 7.3 | 6.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.18 | 0.13 | 0.17 | 0.10 | 0.05 | 0.24 | 0.11 | 0.10 | 0.04 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.034 | 0.032 | 0.026 | 0.023 | 0.024 | 0.026 | 0.026 | 0.027 | 0.027 | 0.024 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.12 | 0.13 | 0.11 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 63 | 65 | 65 | 51 | 57 | 62 | 60 | 59 | 55 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 31 | 31 | 31 | 27 | 28 | 29 | 27 | 27 | 27 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.007 | 0.006 | 0.007 | 0.007 | 0.007 | 0.007 | 0.006 | 0.005 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.031 | 0.029 | 0.029 | 0.027 | 0.025 | 0.031 | 0.029 | 0.025 | 0.019 | 0.011 |
| MERCED, CA | PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 106 | 137 | 153 | 122 | 82 | 119 | 109 | 89 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 52 | 52 | 53 | 52 | 46 | 43 | 39 | 39 | 31 |
| MIAMI, FL | CO | SECOND MAX 8-HOUR | NS | 2 | 5.9 | 4.8 | 7.3 | 6.0 | 7.2 | 6.2 | 5.3 | 4.4 | 4.9 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.12 | 0.05 | 0.05 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.014 | 0.012 | 0.013 | 0.011 | 0.011 | 0.011 | 0.012 | 0.010 | 0.011 | 0.011 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 4 | 0.12 | 0.11 | 0.11 | 0.10 | 0.09 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 50 | 48 | 48 | 54 | 53 | 87 | 67 | 47 | 58 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 28 | 27 | 28 | 26 | 27 | 27 | 26 | 24 | 25 |
| SO ₂ | ARITHMETIC MEAN | UP | 1 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | UP | 1 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 | 0.005 | 0.004 | 0.004 | 0.004 | 0.005 |
| MIDDLESEX-SOMERSET-HUNTERDON, NJ | CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.4 | 5.3 | 5.4 | 5.4 | 4.2 | 3.9 | 3.7 | 4.3 | 5.3 |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.17 | 0.38 | 0.38 | 0.30 | 1.15 | 1.22 | 0.33 | 0.12 | 0.07 | 0.06 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.16 | 0.19 | 0.13 | 0.14 | 0.13 | 0.12 | 0.11 | 0.12 | 0.13 | 0.12 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | — | 67 | 67 | 60 | 65 | 54 | 60 | 56 | 43 | 46 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 34 | 34 | 29 | 30 | 25 | 25 | 27 | 22 | 25 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | 0.011 | 0.012 | 0.010 | 0.007 | 0.007 | 0.006 | 0.005 | 0.005 | 0.004 | 0.005 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.035 | 0.043 | 0.037 | 0.032 | 0.025 | 0.026 | 0.018 | 0.028 | 0.018 | 0.024 |
| MILWAUKEE-WAUKESHA, WI | CO | SECOND MAX 8-HOUR | NS | 5 | 4.5 | 4.2 | 3.9 | 4.5 | 3.8 | 3.3 | 4.3 | 4.6 | 3.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.13 | 0.12 | 0.07 | 0.08 | 0.06 | 0.05 | 0.04 | 0.03 | 0.04 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.023 | 0.023 | 0.024 | 0.022 | 0.021 | 0.021 | 0.020 | 0.021 | 0.021 | 0.020 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 6 | 0.17 | 0.15 | 0.13 | 0.11 | 0.14 | 0.10 | 0.10 | 0.12 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 91 | 84 | 78 | 64 | 53 | 61 | 63 | 63 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 32 | 35 | 33 | 29 | 26 | 26 | 28 | 27 | 25 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.005 | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.003 | 0.004 | 0.003 | 0.004 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.025 | 0.035 | 0.030 | 0.039 | 0.034 | 0.026 | 0.024 | 0.027 | 0.023 | 0.025 |
| MINNEAPOLIS-ST. PAUL, MN-WI | CO | SECOND MAX 8-HOUR | DOWN | 3 | 9.5 | 7.8 | 10.0 | 6.0 | 6.9 | 5.6 | 5.3 | 5.7 | 6.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.55 | 0.55 | 0.38 | 0.77 | 0.31 | 0.25 | 0.12 | 0.07 | 0.23 | 0.12 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.009 | 0.009 | 0.009 | 0.009 | 0.008 | 0.008 | 0.009 | 0.009 | 0.010 | 0.008 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.10 | 0.11 | 0.09 | 0.09 | 0.08 | 0.09 | 0.08 | 0.08 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 10 | — | 66 | 76 | 68 | 60 | 55 | 49 | 56 | 54 | 59 |
| | WEIGHTED ANNUAL MEAN | DOWN | 10 | — | 29 | 29 | 27 | 24 | 21 | 21 | 21 | 22 | 22 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 7 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 7 | 0.017 | 0.016 | 0.016 | 0.015 | 0.017 | 0.018 | 0.014 | 0.011 | 0.011 | 0.012 |
| MOBILE, AL | OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.10 | 0.09 | 0.10 | 0.07 | 0.10 | 0.09 | 0.09 | 0.11 |
| | | | | | | | | | | | | | |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|----------------------------------|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 72 | 62 | 57 | 59 | 69 | 68 | 60 | 53 | 49 |
| | WEIGHTED ANNUAL MEAN | NS | 4 | — | 35 | 31 | 31 | 32 | 34 | 32 | 31 | 29 | 25 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.009 | 0.008 | 0.008 | 0.008 | 0.009 | 0.010 | 0.010 | 0.011 | 0.009 | 0.009 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.052 | 0.054 | 0.064 | 0.038 | 0.050 | 0.054 | 0.066 | 0.052 | 0.053 | 0.070 |
| MODESTO, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 8.6 | 9.7 | 11.8 | 10.5 | 9.4 | 5.9 | 6.6 | 6.3 | 5.4 | 5.6 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.024 | 0.027 | 0.027 | 0.026 | 0.024 | 0.022 | 0.024 | 0.023 | 0.022 | 0.022 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.14 | 0.12 | 0.11 | 0.12 | 0.11 | 0.11 | 0.11 | 0.12 | 0.13 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 129 | 129 | 135 | 133 | 81 | 118 | 101 | 90 | 66 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 46 | 46 | 44 | 48 | 39 | 40 | 37 | 34 | 28 |
| MONMOUTH-OCEAN, NJ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 6.1 | 6.6 | 6.1 | 5.7 | 5.5 | 4.7 | 5.3 | 4.9 | 3.8 | 4.4 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.14 | 0.13 | 0.11 | 0.15 | 0.12 |
| MONROE, LA | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | UP | 1 | — | 72 | 72 | 72 | 58 | 79 | 81 | 99 | 111 | 76 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 30 | 30 | 30 | 25 | 28 | 27 | 34 | 36 | 31 |
| MONTGOMERY, AL | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 40 | 40 | 58 | 60 | 48 | 48 | 45 | 55 | 39 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 23 | 23 | 27 | 26 | 24 | 23 | 25 | 26 | 23 |
| NASHUA, NH | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 7.0 | 5.7 | 6.2 | 7.1 | 6.9 | 6.8 | 5.2 | 7.5 | 6.8 | 6.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.020 | 0.024 | 0.022 | 0.019 | 0.016 | 0.015 | 0.016 | 0.015 | 0.014 | 0.019 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.09 | 0.14 | 0.09 | 0.10 | 0.10 | 0.10 | 0.11 | 0.10 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 5 | — | 52 | 44 | 41 | 50 | 49 | 39 | 38 | 31 | 39 |
| | WEIGHTED ANNUAL MEAN | DOWN | 5 | — | 22 | 22 | 18 | 19 | 17 | 17 | 15 | 14 | 16 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 3 | 0.008 | 0.008 | 0.008 | 0.007 | 0.005 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 3 | 0.041 | 0.044 | 0.040 | 0.036 | 0.024 | 0.025 | 0.022 | 0.028 | 0.023 | 0.021 |
| NASHVILLE, TN | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 6.9 | 6.5 | 7.4 | 5.9 | 5.0 | 5.5 | 6.4 | 5.4 | 4.8 | 3.9 |
| LEAD | MAX QUARTERLY MEAN | NS | 4 | 1.16 | 1.29 | 0.66 | 1.45 | 1.21 | 1.05 | 0.91 | 0.98 | 1.93 | 0.62 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.012 | 0.012 | 0.012 | 0.012 | 0.010 | 0.014 | 0.012 | 0.020 | 0.014 | 0.012 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 7 | 0.11 | 0.12 | 0.10 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 5 | — | 76 | 76 | 75 | 71 | 60 | 79 | 65 | 66 | 59 |
| | WEIGHTED ANNUAL MEAN | DOWN | 5 | — | 38 | 37 | 36 | 35 | 31 | 31 | 30 | 31 | 28 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 5 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 | 0.006 | 0.007 | 0.005 | 0.004 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 6 | 0.033 | 0.049 | 0.057 | 0.050 | 0.055 | 0.030 | 0.045 | 0.041 | 0.030 | 0.037 |
| NASSAU-SUFFOLK, NY | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 9.9 | 9.1 | 6.5 | 7.2 | 6.6 | 5.6 | 5.6 | 5.4 | 5.0 | 4.9 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.032 | 0.033 | 0.029 | 0.028 | 0.029 | 0.026 | 0.026 | 0.028 | 0.025 | 0.026 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.17 | 0.16 | 0.15 | 0.14 | 0.18 | 0.13 | 0.13 | 0.13 | 0.15 | 0.12 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.009 | 0.008 | 0.010 | 0.009 | 0.009 | 0.008 | 0.008 | 0.007 | 0.005 | 0.007 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.038 | 0.056 | 0.045 | 0.045 | 0.039 | 0.039 | 0.033 | 0.037 | 0.030 | 0.028 |
| NEW BEDFORD, MA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.16 | 0.12 | 0.13 | 0.13 | 0.11 | 0.09 | 0.10 | 0.14 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 39 | 39 | 51 | 42 | 44 | 49 | 48 | 28 | 44 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 23 | 23 | 23 | 20 | 17 | 17 | 19 | 14 | 16 |
| NEW HAVEN-MERIDEN, CT | | | | | | | | | | | | | |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.028 | 0.029 | 0.028 | 0.027 | 0.028 | 0.025 | 0.027 | 0.030 | 0.025 | 0.026 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.15 | 0.17 | 0.15 | 0.13 | 0.16 | 0.12 | 0.14 | 0.14 | 0.14 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 8 | — | 67 | 62 | 71 | 76 | 70 | 69 | 68 | 56 | 55 |
| | WEIGHTED ANNUAL MEAN | DOWN | 8 | — | 30 | 30 | 28 | 32 | 25 | 26 | 27 | 23 | 21 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.012 | 0.015 | 0.012 | 0.010 | 0.010 | 0.009 | 0.008 | 0.008 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.055 | 0.071 | 0.071 | 0.045 | 0.055 | 0.042 | 0.038 | 0.049 | 0.031 | 0.027 |
| NEW LONDON-NORWICH, CT-RI | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.16 | 0.15 | 0.14 | 0.16 | 0.14 | 0.12 | 0.13 | 0.12 | 0.14 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 42 | 42 | 48 | 52 | 52 | 40 | 49 | 43 | 50 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 22 | 22 | 20 | 23 | 19 | 18 | 22 | 17 | 18 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.007 | 0.009 | 0.008 | 0.008 | 0.007 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.028 | 0.047 | 0.027 | 0.029 | 0.027 | 0.025 | 0.019 | 0.029 | 0.017 | 0.016 |
| NEW ORLEANS, LA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 6.7 | 6.1 | 6.1 | 4.9 | 4.2 | 5.4 | 5.1 | 4.6 | 3.6 | 4.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.10 | 0.10 | 0.09 | 0.05 | 0.03 | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.021 | 0.019 | 0.017 | 0.016 | 0.015 | 0.017 | 0.016 | 0.015 | 0.016 | 0.015 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 5 | 0.11 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 47 | 58 | 54 | 52 | 52 | 54 | 50 | 50 | 44 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 26 | 31 | 27 | 26 | 27 | 25 | 25 | 24 | 22 |
| SO ₂ | ARITHMETIC MEAN | UP | 2 | 0.004 | 0.004 | 0.003 | 0.003 | 0.004 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | UP | 2 | 0.016 | 0.017 | 0.017 | 0.013 | 0.023 | 0.018 | 0.019 | 0.021 | 0.019 | 0.025 |
| NEW YORK, NY | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 4 | 7.7 | 8.3 | 7.9 | 7.1 | 6.6 | 6.0 | 5.1 | 5.8 | 6.5 | 4.5 |
| LEAD | MAX QUARTERLY MEAN | NS | 3 | 0.11 | 0.14 | 0.08 | 0.09 | 0.08 | 0.06 | 0.09 | 0.08 | 0.07 | 0.08 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.049 | 0.049 | 0.049 | 0.046 | 0.047 | 0.036 | 0.043 | 0.046 | 0.042 | 0.042 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.15 | 0.18 | 0.12 | 0.14 | 0.15 | 0.12 | 0.12 | 0.12 | 0.13 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 12 | — | 68 | 69 | 66 | 61 | 55 | 55 | 69 | 65 | 51 |
| | WEIGHTED ANNUAL MEAN | DOWN | 12 | — | 33 | 34 | 31 | 30 | 27 | 26 | 28 | 26 | 27 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 6 | 0.015 | 0.016 | 0.015 | 0.014 | 0.013 | 0.012 | 0.011 | 0.012 | 0.009 | 0.009 |
| | SECOND MAX 24-HOUR | DOWN | 6 | 0.054 | 0.062 | 0.062 | 0.055 | 0.045 | 0.048 | 0.038 | 0.051 | 0.035 | 0.037 |
| NEWARK, NJ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 3 | 7.4 | 7.3 | 7.6 | 7.1 | 8.3 | 5.6 | 4.9 | 7.7 | 6.0 | 5.1 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.55 | 0.83 | 0.41 | 0.39 | 1.04 | 0.44 | 0.23 | 0.30 | 0.23 | 0.23 |
| NO ₂ | ARITHMETIC MEAN | NS | 5 | 0.031 | 0.031 | 0.028 | 0.028 | 0.027 | 0.029 | 0.027 | 0.029 | 0.027 | 0.028 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 3 | 0.17 | 0.18 | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 80 | 74 | 68 | 62 | 55 | 67 | 95 | 69 | 61 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 35 | 35 | 31 | 30 | 29 | 30 | 35 | 28 | 31 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.011 | 0.012 | 0.012 | 0.010 | 0.010 | 0.009 | 0.007 | 0.008 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 4 | 0.041 | 0.050 | 0.047 | 0.040 | 0.035 | 0.040 | 0.025 | 0.033 | 0.025 | 0.027 |
| NEWBURGH, NY-PA | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 2.46 | 1.18 | 1.36 | 0.54 | 0.28 | 0.22 | 0.28 | 0.06 | 0.05 | 0.06 |
| NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-N | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 6.0 | 5.5 | 5.2 | 4.5 | 5.1 | 4.3 | 5.0 | 5.4 | 4.3 | 4.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.10 | 0.10 | 0.12 | 0.18 | 0.03 | 0.03 | 0.03 | 0.02 | 0.03 | 0.03 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.020 | 0.020 | 0.020 | 0.019 | 0.020 | 0.020 | 0.021 | 0.019 | 0.018 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.13 | 0.10 | 0.11 | 0.10 | 0.13 | 0.13 | 0.10 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 53 | 60 | 58 | 56 | 46 | 54 | 41 | 40 | 43 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 28 | 27 | 26 | 26 | 23 | 23 | 20 | 21 | 22 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.007 | 0.008 | 0.007 | 0.007 | 0.007 | 0.006 | 0.007 | 0.007 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.032 | 0.032 | 0.033 | 0.025 | 0.022 | 0.024 | 0.026 | 0.024 | 0.022 | 0.022 |
| OAKLAND, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 6 | 4.3 | 4.8 | 4.9 | 4.8 | 4.8 | 4.0 | 3.4 | 3.6 | 2.7 | 2.9 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.09 | 0.15 | 0.13 | 0.08 | 0.10 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.022 | 0.023 | 0.022 | 0.021 | 0.022 | 0.020 | 0.020 | 0.020 | 0.019 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 7 | 0.12 | 0.11 | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.10 | 0.13 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 73 | 82 | 81 | 89 | 58 | 66 | 72 | 47 | 41 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 30 | 31 | 30 | 33 | 27 | 25 | 25 | 22 | 22 |
| SO ₂ | ARITHMETIC MEAN | NS | 3 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 3 | 0.009 | 0.009 | 0.013 | 0.011 | 0.010 | 0.009 | 0.010 | 0.007 | 0.007 | 0.007 |
| OKLAHOMA CITY, OK | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 3 | 7.5 | 5.2 | 6.4 | 5.4 | 4.7 | 4.8 | 6.1 | 5.2 | 5.0 | 5.1 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 3 | 0.06 | 0.07 | 0.05 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | NS | 3 | 0.014 | 0.018 | 0.013 | 0.012 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.11 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 5 | — | 54 | 53 | 47 | 45 | 55 | 45 | 42 | 51 | 50 |
| | WEIGHTED ANNUAL MEAN | NS | 5 | — | 25 | 24 | 23 | 23 | 22 | 21 | 21 | 21 | 24 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.005 | 0.010 | 0.007 | 0.004 | 0.002 | 0.002 | 0.003 | 0.004 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.012 | 0.041 | 0.015 | 0.019 | 0.005 | 0.009 | 0.008 | 0.007 | 0.006 | 0.006 |
| OLYMPIA, WA | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 117 | 118 | 86 | 99 | 78 | 78 | 63 | 65 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 35 | 28 | 24 | 25 | 24 | 24 | 17 | 17 | 16 |
| OMAHA, NE-IA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 5.4 | 5.5 | 4.8 | 5.2 | 5.8 | 5.9 | 5.3 | 4.0 | 5.5 | 4.9 |
| LEAD | MAX QUARTERLY MEAN | NS | 5 | 0.55 | 0.79 | 0.67 | 0.54 | 0.44 | 0.69 | 0.55 | 0.73 | 0.49 | 0.40 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 3 | 0.08 | 0.09 | 0.08 | 0.07 | 0.08 | 0.08 | 0.06 | 0.07 | 0.08 | 0.07 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 7 | — | 96 | 95 | 92 | 78 | 89 | 70 | 81 | 77 | 78 |
| | WEIGHTED ANNUAL MEAN | DOWN | 7 | — | 42 | 42 | 37 | 36 | 36 | 31 | 33 | 30 | 33 |
| ORANGE COUNTY, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 7.8 | 8.4 | 8.7 | 7.7 | 6.9 | 7.2 | 5.5 | 7.2 | 5.9 | 5.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.09 | 0.09 | 0.08 | 0.06 | 0.06 | 0.03 | 0.05 | 0.04 | 0.04 | 0.04 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.040 | 0.044 | 0.045 | 0.046 | 0.044 | 0.039 | 0.037 | 0.040 | 0.038 | 0.033 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 3 | 0.21 | 0.22 | 0.23 | 0.19 | 0.19 | 0.18 | 0.16 | 0.17 | 0.13 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 96 | 96 | 95 | 97 | 79 | 78 | 83 | 124 | 75 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 45 | 45 | 45 | 41 | 37 | 36 | 41 | 33 | 33 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.005 | 0.004 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.015 | 0.014 | 0.009 | 0.006 | 0.012 | 0.007 | 0.008 | 0.007 | 0.005 | 0.005 |
| ORLANDO, FL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 4.7 | 4.5 | 4.3 | 4.5 | 3.6 | 3.9 | 3.8 | 3.6 | 3.3 | 3.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.05 | 0.05 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.013 | 0.013 | 0.013 | 0.012 | 0.012 | 0.011 | 0.012 | 0.011 | 0.010 | 0.013 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 3 | 0.11 | 0.10 | 0.11 | 0.11 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 45 | 44 | 46 | 42 | 49 | 39 | 37 | 37 | 55 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 28 | 27 | 27 | 27 | 24 | 24 | 23 | 22 | 23 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.002 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.008 | 0.010 | 0.006 | 0.011 | 0.007 | 0.007 | 0.011 | 0.012 | 0.006 | 0.008 |
| OWENSBORO, KY | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.1 | 6.4 | 5.9 | 5.4 | 3.8 | 4.5 | 5.5 | 3.9 | 4.2 | 4.2 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.015 | 0.015 | 0.014 | 0.011 | 0.011 | 0.012 | 0.012 | 0.013 | 0.013 | 0.011 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------------------------------------|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.14 | 0.10 | 0.11 | 0.09 | 0.09 | 0.11 | 0.11 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 80 | 80 | 69 | 55 | 52 | 56 | 90 | 70 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 33 | 33 | 29 | 29 | 27 | 25 | 30 | 29 | 24 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.008 | 0.010 | 0.010 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 | 0.007 | 0.007 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.033 | 0.040 | 0.053 | 0.038 | 0.044 | 0.053 | 0.050 | 0.035 | 0.028 | 0.020 |
| PARKERSBURG-MARIETTA, WV-OH | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.08 | 0.04 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.15 | 0.15 | 0.12 | 0.11 | 0.12 | 0.10 | 0.10 | 0.11 | 0.12 | 0.11 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.017 | 0.015 | 0.016 | 0.014 | 0.014 | 0.014 | 0.014 | 0.017 | 0.010 | 0.010 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.070 | 0.076 | 0.076 | 0.064 | 0.060 | 0.059 | 0.065 | 0.084 | 0.041 | 0.046 |
| PENSACOLA, FL | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.10 | 0.09 | 0.11 | 0.10 | 0.10 | 0.10 | 0.11 | 0.12 | 0.10 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.006 | 0.007 | 0.008 | 0.006 | 0.007 | 0.005 | 0.004 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.086 | 0.071 | 0.057 | 0.078 | 0.056 | 0.057 | 0.032 | 0.039 | 0.019 | 0.015 |
| PEORIA-PEKIN, IL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 7.4 | 7.9 | 7.7 | 7.4 | 6.3 | 7.2 | 7.3 | 5.7 | 5.6 | 4.6 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.08 | 0.04 | 0.04 | 0.04 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.11 | 0.11 | 0.10 | 0.08 | 0.10 | 0.09 | 0.08 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 57 | 70 | 72 | 48 | 54 | 39 | 45 | 42 | 43 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 23 | 28 | 27 | 24 | 25 | 20 | 21 | 20 | 21 |
| SO ₂ | ARITHMETIC MEAN | NS | 2 | 0.008 | 0.009 | 0.007 | 0.007 | 0.008 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.058 | 0.062 | 0.046 | 0.055 | 0.065 | 0.043 | 0.039 | 0.049 | 0.084 | 0.045 |
| PHILADELPHIA, PA-NJ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 9 | 6.3 | 5.4 | 7.1 | 4.9 | 4.6 | 4.7 | 4.7 | 5.2 | 4.1 | 4.2 |
| LEAD | MAX QUARTERLY MEAN | NS | 10 | 0.77 | 0.50 | 0.38 | 0.54 | 0.35 | 0.56 | 0.86 | 0.54 | 0.69 | 0.93 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 5 | 0.033 | 0.031 | 0.030 | 0.028 | 0.028 | 0.028 | 0.026 | 0.028 | 0.027 | 0.028 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 8 | 0.16 | 0.18 | 0.13 | 0.13 | 0.14 | 0.11 | 0.13 | 0.12 | 0.13 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 10 | — | 75 | 73 | 68 | 73 | 55 | 69 | 71 | 65 | 63 |
| | WEIGHTED ANNUAL MEAN | NS | 10 | — | 34 | 34 | 31 | 33 | 27 | 29 | 32 | 31 | 30 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 10 | 0.011 | 0.012 | 0.011 | 0.010 | 0.009 | 0.008 | 0.008 | 0.009 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 10 | 0.046 | 0.052 | 0.045 | 0.040 | 0.034 | 0.034 | 0.031 | 0.040 | 0.026 | 0.026 |
| PHOENIX-MESA, AZ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 9 | 8.0 | 7.6 | 7.4 | 6.2 | 5.9 | 6.0 | 5.7 | 5.9 | 5.8 | 5.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.19 | 0.16 | 0.09 | 0.09 | 0.11 | 0.06 | 0.05 | 0.05 | 0.06 | 0.04 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 9 | 0.11 | 0.11 | 0.10 | 0.11 | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 6 | — | 96 | 113 | 85 | 84 | 97 | 79 | 83 | 88 | 81 |
| | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 48 | 51 | 43 | 44 | 43 | 43 | 42 | 43 | 42 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.001 | 0.001 | 0.002 | 0.003 | 0.005 | 0.004 | 0.003 | 0.003 | 0.002 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.010 | 0.001 | 0.006 | 0.011 | 0.013 | 0.010 | 0.009 | 0.009 | 0.008 | 0.017 |
| PINE BLUFF, AR | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 60 | 60 | 47 | 42 | 51 | 55 | 56 | 62 | 51 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 27 | 27 | 21 | 19 | 22 | 23 | 25 | 26 | 23 |
| PITTSBURGH, PA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 5 | 5.6 | 5.1 | 5.3 | 5.6 | 4.3 | 4.8 | 3.8 | 4.3 | 3.8 | 3.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.12 | 0.13 | 0.12 | 0.09 | 0.09 | 0.07 | 0.07 | 0.08 | 0.06 | 0.04 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 5 | 0.025 | 0.023 | 0.023 | 0.023 | 0.023 | 0.022 | 0.022 | 0.023 | 0.021 | 0.021 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 6 | 0.12 | 0.13 | 0.11 | 0.10 | 0.11 | 0.09 | 0.11 | 0.11 | 0.12 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 14 | — | 96 | 89 | 80 | 80 | 75 | 77 | 83 | 72 | 61 |
| | WEIGHTED ANNUAL MEAN | DOWN | 14 | — | 35 | 34 | 32 | 33 | 29 | 29 | 32 | 29 | 28 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 12 | 0.017 | 0.018 | 0.018 | 0.017 | 0.015 | 0.015 | 0.015 | 0.015 | 0.011 | 0.011 |
| | SECOND MAX 24-HOUR | DOWN | 12 | 0.077 | 0.078 | 0.075 | 0.074 | 0.056 | 0.068 | 0.062 | 0.072 | 0.047 | 0.044 |
| PITTSFIELD, MA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.09 | 0.09 | 0.09 | 0.11 | 0.10 | 0.11 | 0.11 | 0.09 | 0.09 | 0.11 |
| PONCE, PR | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 96 | 96 | 77 | 58 | 64 | 66 | 64 | 57 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 46 | 46 | 38 | 30 | 29 | 30 | 27 | 24 | 24 |
| PORTLAND-VANCOUVER, OR-WA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 10.7 | 8.9 | 8.2 | 8.5 | 9.1 | 7.0 | 6.3 | 7.0 | 5.7 | 6.1 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.17 | 0.12 | 0.07 | 0.06 | 0.06 | 0.05 | 0.06 | 0.04 | 0.03 | 0.02 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.10 | 0.11 | 0.08 | 0.12 | 0.09 | 0.10 | 0.09 | 0.09 | 0.09 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 75 | 72 | 61 | 85 | 59 | 66 | 50 | 41 | 48 |
| | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 28 | 25 | 25 | 26 | 23 | 25 | 23 | 20 | 20 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.006 | 0.006 | 0.007 | 0.006 | 0.006 | 0.007 | 0.006 | 0.005 | 0.005 | 0.005 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.018 | 0.018 | 0.023 | 0.019 | 0.024 | 0.017 | 0.025 | 0.013 | 0.013 | 0.013 |
| PORTLAND, ME | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.14 | 0.17 | 0.13 | 0.13 | 0.14 | 0.12 | 0.11 | 0.12 | 0.12 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 58 | 56 | 42 | 54 | 57 | 48 | 51 | 49 | 37 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 24 | 26 | 23 | 25 | 23 | 21 | 21 | 21 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.011 | 0.010 | 0.010 | 0.010 | 0.009 | 0.008 | 0.009 | 0.008 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.042 | 0.044 | 0.039 | 0.034 | 0.032 | 0.029 | 0.032 | 0.043 | 0.022 | 0.021 |
| PORTSMOUTH-ROCHESTER, NH-ME | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.14 | 0.17 | 0.12 | 0.11 | 0.14 | 0.11 | 0.11 | 0.11 | 0.12 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 51 | 44 | 44 | 49 | 57 | 39 | 37 | 37 | 40 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SO2 | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 21 | 21 | 20 | 19 | 19 | 18 | 14 | 15 | 16 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.006 | 0.008 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.004 | 0.004 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 1 | 0.034 | 0.034 | 0.029 | 0.025 | 0.021 | 0.027 | 0.019 | 0.022 | 0.017 | 0.015 |
| PROVIDENCE-FALL RIVER-WARWICK, RI-MA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 8.1 | 7.3 | 6.2 | 7.3 | 7.4 | 6.3 | 5.4 | 6.7 | 7.0 | 4.4 |
| NO2 | ARITHMETIC MEAN | NS | 1 | 0.024 | 0.024 | 0.024 | 0.024 | 0.025 | 0.023 | 0.022 | 0.022 | 0.022 | 0.025 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.15 | 0.15 | 0.12 | 0.13 | 0.14 | 0.11 | 0.11 | 0.12 | 0.13 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 61 | 60 | 58 | 68 | 52 | 56 | 60 | 63 | 59 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 31 | 31 | 29 | 30 | 24 | 26 | 29 | 24 | 27 |
| SO2 | ARITHMETIC MEAN | DOWN | 5 | 0.011 | 0.011 | 0.010 | 0.009 | 0.008 | 0.009 | 0.008 | 0.007 | 0.005 | 0.006 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 5 | 0.049 | 0.050 | 0.043 | 0.039 | 0.039 | 0.044 | 0.036 | 0.035 | 0.022 | 0.030 |
| PROVO-OREM, UT | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 13.3 | 11.0 | 15.8 | 16.2 | 11.6 | 10.0 | 9.6 | 9.3 | 7.1 | 7.1 |
| NO2 | ARITHMETIC MEAN | NS | 1 | 0.024 | 0.028 | 0.028 | 0.025 | 0.022 | 0.019 | 0.026 | 0.024 | 0.023 | 0.024 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.10 | 0.11 | 0.11 | 0.09 | 0.08 | 0.09 | 0.08 | 0.08 | 0.08 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 184 | 222 | 115 | 220 | 202 | 194 | 106 | 94 | 125 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 50 | 49 | 32 | 42 | 37 | 38 | 34 | 29 | 34 |
| PUEBLO, CO | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 70 | 75 | 52 | 57 | 54 | 51 | 54 | 86 | 49 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 35 | 33 | 26 | 30 | 26 | 26 | 30 | 26 | 26 |
| RACINE, WI | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 6.7 | 7.4 | 6.4 | 5.5 | 5.7 | 4.9 | 4.1 | 4.3 | 4.3 | 3.0 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.18 | 0.18 | 0.14 | 0.11 | 0.14 | 0.10 | 0.10 | 0.11 | 0.11 | 0.13 |
| RALEIGH-DURHAM-CHAPEL HILL, NC | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 10.9 | 10.9 | 10.9 | 8.7 | 8.8 | 7.3 | 7.2 | 6.9 | 6.6 | 5.6 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.11 | 0.11 | 0.11 | 0.12 | 0.11 | 0.10 | 0.11 | 0.11 | 0.10 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 73 | 60 | 50 | 51 | 46 | 47 | 37 | 48 | 50 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 34 | 29 | 29 | 26 | 24 | 25 | 22 | 23 | 25 |
| RAPID CITY, SD | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 74 | 68 | 76 | 138 | 80 | 88 | 79 | 75 | 62 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 2 | — | 29 | 26 | 27 | 28 | 25 | 23 | 29 | 24 | 23 |
| READING, PA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.3 | 5.2 | 5.0 | 6.4 | 4.6 | 4.6 | 3.8 | 5.4 | 3.9 | 3.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 9 | 0.59 | 0.49 | 0.59 | 0.50 | 0.53 | 0.42 | 0.39 | 0.33 | 0.26 | 0.25 |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.025 | 0.024 | 0.023 | 0.022 | 0.022 | 0.020 | 0.021 | 0.023 | 0.021 | 0.022 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.15 | 0.11 | 0.11 | 0.12 | 0.10 | 0.11 | 0.10 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 52 | 52 | 61 | 67 | 47 | 55 | 80 | 54 | 54 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 31 | 31 | 26 | 28 | 23 | 25 | 29 | 26 | 26 |
| SO2 | ARITHMETIC MEAN | DOWN | 2 | 0.012 | 0.013 | 0.012 | 0.010 | 0.010 | 0.009 | 0.009 | 0.011 | 0.009 | 0.009 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 2 | 0.043 | 0.053 | 0.048 | 0.038 | 0.034 | 0.033 | 0.033 | 0.040 | 0.033 | 0.036 |
| REDDING, CA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.08 | 0.08 | 0.09 | 0.09 | 0.08 | 0.08 | 0.07 | 0.09 | 0.09 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 66 | 66 | 59 | 74 | 58 | 50 | 54 | 47 | 34 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 26 | 26 | 25 | 29 | 25 | 20 | 24 | 20 | 19 |
| RENO, NV | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 8.6 | 8.6 | 9.1 | 8.3 | 9.2 | 7.4 | 5.8 | 6.9 | 5.3 | 5.9 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 2 | 0.10 | 0.10 | 0.10 | 0.11 | 0.09 | 0.08 | 0.09 | 0.09 | 0.08 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 127 | 123 | 135 | 106 | 86 | 92 | 86 | 65 | 72 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 44 | 42 | 44 | 36 | 36 | 40 | 36 | 32 | 29 |
| RICHLAND-KENNEWICK-PASCO, WA | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 90 | 175 | 382 | 281 | 85 | 136 | 103 | 103 | 103 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 33 | 29 | 40 | 31 | 24 | 28 | 27 | 27 | 27 |
| RICHMOND-PETERSBURG, VA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 6.0 | 4.1 | 4.0 | 4.4 | 3.7 | 2.5 | 3.9 | 3.4 | 2.6 | 2.9 |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.026 | 0.026 | 0.025 | 0.023 | 0.024 | 0.023 | 0.024 | 0.024 | 0.022 | 0.022 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.13 | 0.14 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.11 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 59 | 54 | 59 | 59 | 44 | 55 | 37 | 53 | 63 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 28 | 28 | 25 | 26 | 22 | 23 | 21 | 23 | 24 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.007 | 0.009 | 0.009 | 0.006 | 0.006 | 0.005 | 0.007 | 0.006 | 0.005 | 0.005 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 1 | 0.031 | 0.042 | 0.032 | 0.034 | 0.027 | 0.024 | 0.023 | 0.022 | 0.016 | 0.027 |
| RIVERSIDE-SAN BERNARDINO, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 7 | 4.5 | 4.7 | 5.1 | 4.4 | 5.1 | 3.6 | 3.5 | 3.5 | 3.4 | 2.9 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 4 | 0.08 | 0.08 | 0.06 | 0.05 | 0.06 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 |
| NO2 | ARITHMETIC MEAN | NS | 7 | 0.028 | 0.030 | 0.030 | 0.029 | 0.029 | 0.027 | 0.028 | 0.028 | 0.029 | 0.027 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 16 | 0.21 | 0.22 | 0.22 | 0.21 | 0.21 | 0.19 | 0.18 | 0.19 | 0.18 | 0.17 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 10 | — | 134 | 208 | 160 | 133 | 100 | 107 | 99 | 115 | 95 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 10 | — | 66 | 69 | 62 | 58 | 50 | 49 | 47 | 47 | 45 |
| SO2 | ARITHMETIC MEAN | DOWN | 4 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 4 | 0.007 | 0.012 | 0.013 | 0.006 | 0.008 | 0.009 | 0.006 | 0.004 | 0.005 | 0.004 |
| ROANOKE, VA | | | | | | | | | | | | | |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.016 | 0.016 | 0.014 | 0.013 | 0.014 | 0.013 | 0.014 | 0.013 | 0.013 | 0.013 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.13 | 0.10 | 0.09 | 0.10 | 0.09 | 0.10 | 0.10 | 0.09 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 65 | 65 | 68 | 63 | 64 | 72 | 68 | 74 | 70 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------------------|-------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SO2 | WEIGHTED ANNUAL MEAN | NS | 2 | — | 37 | 35 | 36 | 33 | 32 | 35 | 36 | 34 |
| | ARITHMETIC MEAN | DOWN | 1 | 0.004 | 0.004 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.014 | 0.018 | 0.022 | 0.018 | 0.019 | 0.016 | 0.018 | 0.011 | 0.010 |
| ROCHESTER, MN | SECOND MAX 8-HOUR | DOWN | 1 | 9.0 | 7.1 | 6.3 | 6.1 | 6.3 | 5.1 | 4.9 | 5.0 | 4.0 |
| CO | SECOND MAX 24-HOUR | NS | 1 | — | 54 | 64 | 89 | 43 | 44 | 38 | 43 | 49 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 29 | 30 | 28 | 23 | 21 | 20 | 21 | 19 |
| ROCHESTER, NY | SECOND MAX 8-HOUR | NS | 2 | 3.8 | 4.0 | 3.6 | 3.5 | 3.3 | 3.5 | 3.2 | 4.5 | 3.2 |
| CO | MAX QUARTERLY MEAN | NS | 1 | 0.10 | 0.09 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.13 | 0.10 | 0.11 | 0.11 | 0.09 | 0.09 | 0.11 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 81 | 60 | 47 | 61 | 49 | 64 | 42 | 45 |
| WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 30 | 24 | 21 | 26 | 22 | 23 | 20 | 21 | 21 |
| SO2 | ARITHMETIC MEAN | DOWN | 2 | 0.011 | 0.012 | 0.013 | 0.012 | 0.011 | 0.011 | 0.010 | 0.011 | 0.010 |
| SECOND MAX 24-HOUR | NS | 2 | 0.045 | 0.038 | 0.054 | 0.040 | 0.043 | 0.039 | 0.041 | 0.043 | 0.038 | 0.033 |
| ROCKFORD, IL | SECOND MAX 8-HOUR | DOWN | 1 | 8.0 | 8.1 | 6.6 | 6.5 | 5.1 | 4.6 | 4.3 | 4.0 | 4.5 |
| CO | MAX QUARTERLY MEAN | DOWN | 1 | 0.05 | 0.13 | 0.07 | 0.09 | 0.04 | 0.06 | 0.03 | 0.04 | 0.03 |
| LEAD | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.09 | 0.11 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 37 | 58 | 54 | 55 | 49 | 42 | 44 | 45 |
| WEIGHTED ANNUAL MEAN | NS | 1 | — | 17 | 25 | 25 | 22 | 21 | 16 | 19 | 19 | 18 |
| SACRAMENTO, CA | SECOND MAX 8-HOUR | DOWN | 5 | 9.5 | 10.4 | 9.8 | 9.6 | 8.4 | 6.7 | 7.2 | 6.9 | 5.4 |
| CO | MAX QUARTERLY MEAN | DOWN | 2 | 0.11 | 0.08 | 0.07 | 0.10 | 0.04 | 0.02 | 0.05 | 0.02 | 0.02 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.019 | 0.019 | 0.019 | 0.019 | 0.017 | 0.017 | 0.018 | 0.015 | 0.016 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 6 | 0.13 | 0.14 | 0.11 | 0.13 | 0.14 | 0.12 | 0.12 | 0.11 | 0.13 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.010 | 0.010 | 0.006 | 0.006 | 0.003 | 0.002 | 0.001 | 0.001 | 0.001 |
| SECOND MAX 24-HOUR | DOWN | 1 | 0.020 | 0.020 | 0.020 | 0.010 | 0.010 | 0.010 | 0.003 | 0.004 | 0.004 | 0.003 |
| SAGINAW-BAY CITY-MIDLAND, MI | SECOND MAX 24-HOUR | DOWN | 1 | — | 100 | 124 | 71 | 86 | 115 | 51 | 45 | 45 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 31 | 30 | 26 | 30 | 29 | 22 | 22 | 22 |
| SALINAS, CA | SECOND MAX 8-HOUR | NS | 1 | 2.3 | 2.3 | 2.3 | 2.5 | 2.1 | 2.3 | 2.1 | 2.0 | 1.7 |
| CO | ARITHMETIC MEAN | DOWN | 1 | 0.013 | 0.014 | 0.014 | 0.012 | 0.012 | 0.012 | 0.012 | 0.011 | 0.011 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.08 | 0.08 | 0.10 | 0.08 | 0.08 | 0.07 | 0.08 | 0.07 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 49 | 49 | 49 | 43 | 38 | 55 | 33 | 47 |
| WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 25 | 25 | 23 | 23 | 22 | 22 | 20 | 21 | 20 |
| SALT LAKE CITY-OGDEN, UT | SECOND MAX 8-HOUR | DOWN | 2 | 8.7 | 7.7 | 7.3 | 6.9 | 7.8 | 7.6 | 6.5 | 6.4 | 5.7 |
| CO | MAX QUARTERLY MEAN | DOWN | 3 | 0.16 | 0.16 | 0.13 | 0.08 | 0.08 | 0.05 | 0.06 | 0.05 | 0.05 |
| LEAD | ARITHMETIC MEAN | NS | 1 | 0.024 | 0.026 | 0.027 | 0.019 | 0.020 | 0.022 | 0.025 | 0.026 | 0.026 |
| NO ₂ | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.11 | 0.12 | 0.13 | 0.11 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 8 | — | 136 | 129 | 96 | 151 | 133 | 114 | 94 | 81 |
| WEIGHTED ANNUAL MEAN | DOWN | 8 | — | 42 | 43 | 32 | 39 | 35 | 35 | 30 | 28 | 31 |
| SO2 | ARITHMETIC MEAN | DOWN | 4 | 0.008 | 0.010 | 0.010 | 0.008 | 0.009 | 0.008 | 0.007 | 0.004 | 0.003 |
| SECOND MAX 24-HOUR | NS | 4 | 0.039 | 0.051 | 0.079 | 0.036 | 0.048 | 0.051 | 0.041 | 0.012 | 0.012 | 0.012 |
| SAN ANTONIO, TX | SECOND MAX 8-HOUR | DOWN | 2 | 6.2 | 5.7 | 6.3 | 5.4 | 4.6 | 4.7 | 5.1 | 3.5 | 4.8 |
| CO | MAX QUARTERLY MEAN | DOWN | 1 | 0.11 | 0.06 | 0.04 | 0.07 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.12 | 0.11 | 0.10 | 0.11 | 0.10 | 0.11 | 0.11 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 63 | 57 | 49 | 48 | 48 | 54 | 47 | 41 |
| WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 21 | 19 |
| SAN DIEGO, CA | SECOND MAX 8-HOUR | DOWN | 7 | 5.8 | 6.1 | 6.6 | 5.8 | 5.4 | 5.0 | 4.5 | 4.8 | 4.2 |
| CO | MAX QUARTERLY MEAN | DOWN | 1 | 0.09 | 0.06 | 0.04 | 0.08 | 0.05 | 0.03 | 0.04 | 0.01 | 0.02 |
| LEAD | ARITHMETIC MEAN | DOWN | 6 | 0.025 | 0.028 | 0.027 | 0.024 | 0.024 | 0.023 | 0.020 | 0.021 | 0.019 |
| NO ₂ | SECOND DAILY MAX 1-HOUR | DOWN | 8 | 0.16 | 0.17 | 0.16 | 0.16 | 0.15 | 0.14 | 0.13 | 0.11 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 67 | 75 | 67 | 74 | 52 | 62 | 72 | 50 |
| WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 36 | 39 | 34 | 37 | 32 | 30 | 31 | 32 | 28 |
| SO2 | ARITHMETIC MEAN | DOWN | 2 | 0.004 | 0.005 | 0.005 | 0.004 | 0.003 | 0.004 | 0.003 | 0.003 | 0.004 |
| SECOND MAX 24-HOUR | NS | 2 | 0.012 | 0.014 | 0.016 | 0.015 | 0.018 | 0.019 | 0.010 | 0.014 | 0.012 | 0.014 |
| SAN FRANCISCO, CA | SECOND MAX 8-HOUR | DOWN | 4 | 6.1 | 6.4 | 5.9 | 5.7 | 6.2 | 4.8 | 4.6 | 4.3 | 3.9 |
| CO | MAX QUARTERLY MEAN | DOWN | 1 | 0.09 | 0.10 | 0.08 | 0.04 | 0.04 | 0.02 | 0.03 | 0.02 | 0.03 |
| LEAD | ARITHMETIC MEAN | DOWN | 1 | 0.024 | 0.026 | 0.026 | 0.021 | 0.024 | 0.022 | 0.024 | 0.021 | 0.022 |
| NO ₂ | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.09 | 0.09 | 0.08 | 0.06 | 0.06 | 0.08 | 0.07 | 0.09 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 84 | 84 | 93 | 84 | 75 | 72 | 65 | 45 |
| WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 33 | 33 | 28 | 32 | 29 | 27 | 25 | 21 | 21 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.002 | 0.002 | 0.003 | 0.002 | 0.002 | 0.003 | 0.002 | 0.001 | 0.002 |
| SECOND MAX 24-HOUR | NS | 1 | 0.010 | 0.012 | 0.015 | 0.010 | 0.013 | 0.012 | 0.010 | 0.005 | 0.005 | 0.007 |
| SAN JOSE, CA | SECOND MAX 8-HOUR | DOWN | 2 | 7.2 | 10.4 | 11.9 | 10.8 | 10.2 | 7.3 | 6.4 | 7.4 | 5.6 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.19 | 0.12 | 0.12 | 0.08 | 0.04 | 0.03 | 0.02 | 0.02 | 0.01 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.13 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.10 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 115 | 122 | 117 | 102 | 85 | 72 | 76 | 47 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 38 | 39 | 36 | 34 | 30 | 25 | 26 | 22 | 21 |
| SAN JUAN-BAYAMON, PR | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 5.5 | 5.4 | 5.5 | 5.3 | 5.3 | 5.3 | 4.5 | 4.8 | 4.9 | 4.0 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 79 | 82 | 80 | 70 | 71 | 75 | 70 | 59 | 63 |
| | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 33 | 34 | 35 | 30 | 28 | 32 | 30 | 26 | 27 |
| SO2 | ARITHMETIC MEAN | UP | 2 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 | 0.004 | 0.003 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.016 | 0.023 | 0.014 | 0.016 | 0.015 | 0.022 | 0.013 | 0.015 | 0.019 | 0.015 |
| SAN LUIS OBISPO-ATASCADERO-PASO ROBLES, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 3.6 | 4.0 | 4.7 | 3.9 | 3.3 | 3.0 | 3.1 | 3.1 | 2.4 | 2.3 |
| NO2 | ARITHMETIC MEAN | DOWN | 2 | 0.012 | 0.012 | 0.013 | 0.012 | 0.012 | 0.011 | 0.011 | 0.011 | 0.010 | 0.010 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 5 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 58 | 58 | 54 | 47 | 41 | 54 | 38 | 49 | 40 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 27 | 27 | 25 | 25 | 23 | 23 | 21 | 21 | 19 |
| SO2 | ARITHMETIC MEAN | NS | 4 | 0.001 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 |
| | SECOND MAX 24-HOUR | NS | 4 | 0.004 | 0.006 | 0.006 | 0.006 | 0.007 | 0.004 | 0.004 | 0.005 | 0.003 | 0.003 |
| SANTA BARBARA-SANTA MARIA-LOMPOC, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 4 | 2.6 | 2.6 | 2.8 | 2.4 | 2.3 | 2.3 | 2.2 | 2.5 | 2.1 | 1.9 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.05 | 0.05 | 0.05 | 0.03 | 0.03 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| NO2 | ARITHMETIC MEAN | DOWN | 19 | 0.008 | 0.008 | 0.008 | 0.007 | 0.007 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 20 | 0.11 | 0.11 | 0.15 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 14 | — | 53 | 54 | 49 | 45 | 45 | 51 | 43 | 45 | 42 |
| | WEIGHTED ANNUAL MEAN | DOWN | 14 | — | 26 | 25 | 23 | 22 | 22 | 24 | 23 | 23 | 22 |
| SO2 | ARITHMETIC MEAN | NS | 12 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | SECOND MAX 24-HOUR | NS | 12 | 0.004 | 0.004 | 0.003 | 0.003 | 0.003 | 0.003 | 0.004 | 0.003 | 0.003 | 0.003 |
| SANTA CRUZ-WATSONVILLE, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | 0.8 | 0.7 |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.006 | 0.008 | 0.009 | 0.008 | 0.010 | 0.007 | 0.006 | 0.006 | 0.005 | 0.005 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.09 | 0.08 | 0.08 | 0.08 | 0.09 | 0.07 | 0.08 | 0.07 | 0.07 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 56 | 50 | 47 | 43 | 35 | 49 | 37 | 36 | 39 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 30 | 31 | 24 | 24 | 22 | 22 | 19 | 19 | 19 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.007 | 0.007 | 0.004 | 0.003 | 0.002 | 0.006 | 0.006 | 0.006 | 0.008 | 0.003 |
| SANTA FE, NM | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 4.3 | 3.8 | 3.5 | 3.5 | 3.9 | 3.7 | 3.4 | 2.7 | 2.3 | 2.2 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 34 | 40 | 43 | 32 | 36 | 32 | 28 | 28 | 29 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 17 | 16 | 17 | 14 | 16 | 15 | 14 | 13 | 14 |
| SANTA ROSA, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 4.1 | 4.9 | 5.0 | 4.3 | 3.8 | 3.5 | 3.8 | 3.2 | 2.4 | 3.0 |
| NO2 | ARITHMETIC MEAN | NS | 1 | 0.016 | 0.016 | 0.015 | 0.015 | 0.015 | 0.016 | 0.016 | 0.015 | 0.015 | 0.014 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.10 | 0.09 | 0.08 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 52 | 52 | 51 | 69 | 44 | 45 | 41 | 37 | 34 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 23 | 23 | 20 | 23 | 18 | 19 | 18 | 16 | 16 |
| SARASOTA-BRADENTON, FL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 6.3 | 6.3 | 6.3 | 6.2 | 6.9 | 5.6 | 6.5 | 5.3 | 5.9 | 5.1 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.08 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.09 | 0.10 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 43 | 43 | 43 | 53 | 72 | 66 | 48 | 37 | 38 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 24 | 24 | 24 | 24 | 26 | 25 | 22 | 20 | 19 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.002 | 0.002 | 0.003 | 0.002 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.008 | 0.012 | 0.017 | 0.016 | 0.035 | 0.021 | 0.018 | 0.017 | 0.010 | 0.018 |
| SAVANNAH, GA | | | | | | | | | | | | | |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.002 | 0.007 | 0.003 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.010 | 0.046 | 0.013 | 0.008 | 0.009 | 0.008 | 0.011 | 0.015 | 0.013 | 0.019 |
| SCRANTON—WILKES-BARRE—HAZLETON, PA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 4.8 | 4.8 | 4.1 | 4.5 | 4.2 | 3.8 | 2.9 | 3.6 | 2.8 | 3.8 |
| NO2 | ARITHMETIC MEAN | DOWN | 2 | 0.020 | 0.018 | 0.019 | 0.018 | 0.017 | 0.016 | 0.018 | 0.018 | 0.016 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.11 | 0.13 | 0.10 | 0.10 | 0.12 | 0.10 | 0.11 | 0.10 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 66 | 58 | 61 | 65 | 45 | 69 | 61 | 64 | 50 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 29 | 29 | 25 | 29 | 25 | 26 | 28 | 25 | 24 |
| SO2 | ARITHMETIC MEAN | DOWN | 2 | 0.011 | 0.010 | 0.009 | 0.010 | 0.009 | 0.008 | 0.007 | 0.007 | 0.005 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.048 | 0.051 | 0.047 | 0.049 | 0.039 | 0.033 | 0.026 | 0.035 | 0.036 | 0.028 |
| SEATTLE-BELLEVUE-EVERETT, WA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 5 | 9.3 | 9.1 | 8.5 | 7.3 | 7.4 | 7.5 | 5.6 | 5.4 | 5.4 | 5.0 |
| LEAD | MAX QUARTERLY MEAN | NS | 2 | 0.29 | 0.47 | 0.21 | 0.35 | 0.30 | 0.22 | 0.20 | 0.32 | 0.27 | 0.34 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.09 | 0.11 | 0.08 | 0.12 | 0.10 | 0.09 | 0.10 | 0.11 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 7 | — | 81 | 96 | 83 | 93 | 74 | 75 | 59 | 61 | 56 |
| | WEIGHTED ANNUAL MEAN | DOWN | 7 | — | 31 | 32 | 29 | 30 | 29 | 28 | 23 | 22 | 20 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.007 | 0.007 | 0.006 | 0.009 | 0.010 | 0.010 | 0.009 | 0.007 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.022 | 0.028 | 0.022 | 0.026 | 0.028 | 0.024 | 0.022 | 0.017 | 0.020 | 0.019 |
| SHARON, PA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.12 | 0.14 | 0.11 | 0.10 | 0.11 | 0.10 | 0.11 | 0.11 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 84 | 88 | 68 | 73 | 58 | 56 | 68 | 72 | 52 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------------------------------------|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SO2 | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 37 | 35 | 30 | 36 | 27 | 28 | 30 | 28 | 29 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.009 | 0.011 | 0.011 | 0.010 | 0.009 | 0.008 | 0.008 | 0.008 | 0.008 | 0.007 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 1 | 0.037 | 0.054 | 0.043 | 0.036 | 0.032 | 0.030 | 0.029 | 0.047 | 0.032 | 0.029 |
| SHREVEPORT-BOSSIER CITY, LA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.11 | 0.12 | 0.11 | 0.10 | 0.10 | 0.11 | 0.09 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 47 | 47 | 47 | 100 | 44 | 52 | 51 | 52 | 44 |
| SO2 | WEIGHTED ANNUAL MEAN | NS | 1 | — | 23 | 23 | 23 | 28 | 24 | 22 | 24 | 24 | 22 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.003 | 0.003 | 0.004 | 0.002 | 0.002 | 0.004 | 0.004 | 0.002 | 0.001 | 0.002 |
| SO2 | SECOND MAX 24-HOUR | NS | 1 | 0.010 | 0.009 | 0.023 | 0.006 | 0.009 | 0.013 | 0.011 | 0.008 | 0.004 | 0.004 |
| SIOUX CITY, IA-NE | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 77 | 75 | 69 | 66 | 87 | 44 | 69 | 62 | 95 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 31 | 28 | 28 | 28 | 25 | 23 | 23 | 26 | 33 |
| SIOUX FALLS, SD | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 52 | 54 | 46 | 44 | 43 | 48 | 43 | 50 | 43 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 1 | — | 22 | 22 | 20 | 19 | 19 | 15 | 22 | 20 | 19 |
| SOUTH BEND, IN | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.10 | 0.12 | 0.08 | 0.09 | 0.10 | 0.10 | 0.09 | 0.10 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 78 | 71 | 89 | 63 | 64 | 59 | 61 | 51 | 44 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 29 | 30 | 31 | 30 | 23 | 24 | 27 | 22 | 20 |
| SPOKANE, WA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 19.0 | 13.8 | 12.3 | 11.5 | 11.0 | 9.9 | 9.8 | 8.1 | 8.4 | 9.0 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 137 | 142 | 173 | 93 | 143 | 120 | 85 | 76 | 91 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 50 | 46 | 45 | 40 | 40 | 40 | 37 | 31 | 32 |
| SPRINGFIELD, IL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 4.6 | 4.8 | 4.4 | 4.4 | 4.3 | 4.5 | 3.9 | 3.1 | 3.2 | 3.0 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.11 | 0.11 | 0.10 | 0.10 | 0.09 | 0.11 | 0.10 | 0.10 | 0.10 |
| SO2 | ARITHMETIC MEAN | DOWN | 1 | 0.008 | 0.007 | 0.007 | 0.007 | 0.008 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| SO2 | SECOND MAX 24-HOUR | NS | 1 | 0.039 | 0.074 | 0.047 | 0.054 | 0.048 | 0.043 | 0.040 | 0.050 | 0.062 | 0.061 |
| SPRINGFIELD, MA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 8.3 | 7.3 | 7.3 | 6.7 | 6.3 | 7.1 | 6.1 | 7.5 | 7.9 | 7.1 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.14 | 0.09 | 0.06 | 0.05 | 0.03 | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 |
| NO2 | ARITHMETIC MEAN | DOWN | 2 | 0.018 | 0.019 | 0.018 | 0.018 | 0.017 | 0.016 | 0.016 | 0.019 | 0.015 | 0.016 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 4 | 0.12 | 0.16 | 0.12 | 0.12 | 0.13 | 0.12 | 0.13 | 0.12 | 0.12 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 4 | — | 56 | 49 | 52 | 50 | 56 | 50 | 56 | 43 | 47 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 27 | 25 | 22 | 22 | 20 | 20 | 23 | 19 | 20 |
| SO2 | ARITHMETIC MEAN | DOWN | 6 | 0.010 | 0.010 | 0.009 | 0.009 | 0.008 | 0.007 | 0.006 | 0.006 | 0.006 | 0.006 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 6 | 0.039 | 0.050 | 0.033 | 0.034 | 0.030 | 0.030 | 0.022 | 0.037 | 0.025 | 0.026 |
| SPRINGFIELD, MO | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 7.5 | 6.9 | 6.7 | 7.2 | 6.9 | 6.2 | 5.3 | 5.9 | 4.1 | 3.3 |
| NO2 | ARITHMETIC MEAN | NS | 1 | 0.010 | 0.010 | 0.010 | 0.008 | 0.008 | 0.010 | 0.011 | 0.013 | 0.012 | 0.011 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.09 | 0.09 | 0.07 | 0.08 | 0.07 | 0.08 | 0.08 | 0.09 | 0.10 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 43 | 42 | 42 | 33 | 42 | 37 | 38 | 37 | 38 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 22 | 22 | 22 | 18 | 19 | 17 | 17 | 17 | 18 |
| SO2 | ARITHMETIC MEAN | NS | 2 | 0.007 | 0.006 | 0.006 | 0.006 | 0.003 | 0.004 | 0.006 | 0.008 | 0.003 | 0.005 |
| SO2 | SECOND MAX 24-HOUR | NS | 2 | 0.079 | 0.057 | 0.052 | 0.057 | 0.033 | 0.034 | 0.040 | 0.067 | 0.021 | 0.043 |
| ST. JOSEPH, MO | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 112 | 100 | 104 | 120 | 89 | 100 | 77 | 101 | 126 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 46 | 45 | 40 | 44 | 39 | 32 | 34 | 33 | 32 |
| ST. LOUIS, MO-IL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 7 | 6.2 | 4.6 | 4.8 | 4.0 | 4.1 | 3.3 | 3.3 | 3.5 | 3.3 | 3.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 12 | 1.06 | 1.99 | 0.81 | 0.71 | 0.62 | 0.64 | 0.50 | 0.56 | 0.57 | 0.61 |
| NO2 | ARITHMETIC MEAN | NS | 8 | 0.021 | 0.020 | 0.019 | 0.018 | 0.018 | 0.019 | 0.018 | 0.019 | 0.019 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 16 | 0.13 | 0.13 | 0.11 | 0.11 | 0.11 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 15 | — | 84 | 84 | 78 | 62 | 67 | 62 | 67 | 64 | 56 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 15 | — | 37 | 37 | 33 | 32 | 32 | 28 | 31 | 30 | 27 |
| SO2 | ARITHMETIC MEAN | DOWN | 15 | 0.012 | 0.012 | 0.012 | 0.011 | 0.010 | 0.009 | 0.009 | 0.009 | 0.008 | 0.008 |
| SO2 | SECOND MAX 24-HOUR | DOWN | 15 | 0.054 | 0.054 | 0.056 | 0.042 | 0.042 | 0.039 | 0.041 | 0.041 | 0.037 | 0.039 |
| STAMFORD-NORWALK, CT | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 6.3 | 6.9 | 6.0 | 6.3 | 6.0 | 5.5 | 5.2 | 6.2 | 5.4 | 4.1 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.17 | 0.22 | 0.16 | 0.14 | 0.15 | 0.11 | 0.15 | 0.16 | 0.14 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 4 | — | 62 | 59 | 62 | 59 | 48 | 48 | 64 | 51 | 47 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | NS | 4 | — | 30 | 28 | 29 | 31 | 23 | 22 | 27 | 24 | 24 |
| SO2 | ARITHMETIC MEAN | NS | 1 | 0.005 | 0.006 | 0.006 | 0.005 | 0.006 | 0.005 | 0.005 | 0.006 | 0.004 | 0.005 |
| SO2 | SECOND MAX 24-HOUR | NS | 1 | 0.022 | 0.031 | 0.029 | 0.024 | 0.025 | 0.022 | 0.020 | 0.028 | 0.023 | 0.019 |
| STATE COLLEGE, PA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.14 | 0.10 | 0.11 | 0.12 | 0.10 | 0.11 | 0.10 | 0.11 | 0.11 |
| STEUBENVILLE-WEIRTON, OH-WV | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 30.3 | 19.6 | 13.3 | 20.5 | 13.9 | 6.9 | 6.6 | 8.2 | 5.7 | 5.3 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.17 | 0.05 | 0.09 | 0.08 | 0.07 | 0.14 | 0.07 | 0.07 | 0.06 | 0.04 |
| NO2 | ARITHMETIC MEAN | NS | 1 | 0.020 | 0.021 | 0.023 | 0.020 | 0.021 | 0.019 | 0.017 | 0.020 | 0.020 | 0.020 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.12 | 0.10 | 0.09 | 0.11 | 0.09 | 0.10 | 0.10 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 6 | — | 98 | 121 | 95 | 102 | 84 | 93 | 109 | 90 | 88 |
| PM ₁₀ | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 41 | 42 | 37 | 40 | 36 | 34 | 35 | 34 | 32 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|--|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SO2 | ARITHMETIC MEAN | DOWN | 5 | 0.024 | 0.026 | 0.026 | 0.025 | 0.024 | 0.019 | 0.019 | 0.018 | 0.012 | 0.011 |
| | SECOND MAX 24-HOUR | DOWN | 5 | 0.097 | 0.088 | 0.092 | 0.085 | 0.078 | 0.076 | 0.085 | 0.093 | 0.049 | 0.048 |
| STOCKTON-LODI, CA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 8.4 | 9.4 | 9.0 | 10.9 | 9.7 | 5.9 | 5.8 | 7.0 | 4.8 | 6.0 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.06 | 0.06 | 0.05 | 0.04 | 0.04 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.025 | 0.026 | 0.026 | 0.026 | 0.025 | 0.024 | 0.024 | 0.024 | 0.022 | 0.023 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.12 | 0.12 | 0.11 | 0.12 | 0.11 | 0.11 | 0.11 | 0.12 | 0.13 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 2 | — | 97 | 113 | 118 | 127 | 77 | 100 | 95 | 91 | 55 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 42 | 46 | 45 | 49 | 39 | 36 | 35 | 31 | 26 |
| SYRACUSE, NY | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 9.4 | 7.8 | 9.7 | 6.8 | 8.4 | 7.5 | 5.6 | 6.5 | 3.3 | 3.9 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 3 | — | 66 | 66 | 62 | 74 | 62 | 67 | 59 | 51 | 53 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 32 | 32 | 27 | 29 | 27 | 24 | 24 | 23 | 23 |
| TACOMA, WA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 10.5 | 11.6 | 10.3 | 8.0 | 8.7 | 8.9 | 5.9 | 6.0 | 6.3 | 6.3 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.10 | 0.11 | 0.09 | 0.13 | 0.09 | 0.10 | 0.10 | 0.11 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 4 | — | 90 | 106 | 91 | 94 | 89 | 78 | 66 | 67 | 60 |
| | WEIGHTED ANNUAL MEAN | DOWN | 4 | — | 34 | 36 | 32 | 32 | 33 | 30 | 25 | 25 | 24 |
| SO2 | ARITHMETIC MEAN | NS | 2 | 0.007 | 0.007 | 0.007 | 0.008 | 0.008 | 0.009 | 0.009 | 0.007 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.029 | 0.029 | 0.027 | 0.026 | 0.023 | 0.030 | 0.025 | 0.021 | 0.020 | 0.024 |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 6 | 3.7 | 4.4 | 3.7 | 3.8 | 2.9 | 2.9 | 2.6 | 2.2 | 2.8 | 2.5 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 2 | 0.03 | 0.03 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 | 0.012 | 0.010 | 0.012 | 0.011 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 5 | 0.12 | 0.11 | 0.10 | 0.11 | 0.11 | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 52 | 50 | 46 | 48 | 55 | 55 | 59 | 52 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 3 | — | 29 | 29 | 28 | 29 | 26 | 27 | 26 | 25 | 25 |
| SO2 | ARITHMETIC MEAN | DOWN | 6 | 0.006 | 0.006 | 0.007 | 0.006 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | DOWN | 6 | 0.028 | 0.028 | 0.027 | 0.026 | 0.022 | 0.023 | 0.023 | 0.024 | 0.020 | 0.022 |
| TERRE HAUTE, IN | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.08 | 0.11 | 0.11 | 0.10 | 0.08 | 0.09 | 0.11 | 0.10 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 5 | — | 93 | 87 | 88 | 75 | 61 | 63 | 54 | 62 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 5 | — | 34 | 33 | 33 | 30 | 26 | 25 | 25 | 27 | 22 |
| SO2 | ARITHMETIC MEAN | NS | 2 | 0.009 | 0.008 | 0.009 | 0.011 | 0.011 | 0.007 | 0.009 | 0.010 | 0.007 | 0.009 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.038 | 0.035 | 0.043 | 0.038 | 0.037 | 0.033 | 0.039 | 0.039 | 0.029 | 0.033 |
| TEXARKANA, TX-TEXARKANA, AR | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | UP | 1 | — | 40 | 40 | 48 | 45 | 50 | 44 | 52 | 55 | 50 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 26 | 26 | 24 | 22 | 23 | 22 | 23 | 26 | 23 |
| TOLEDO, OH | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.65 | 0.54 | 0.48 | 0.79 | 0.48 | 0.57 | 0.63 | 0.70 | 0.43 | 0.44 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.11 | 0.13 | 0.10 | 0.10 | 0.11 | 0.09 | 0.11 | 0.11 | 0.11 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 64 | 64 | 59 | 60 | 53 | 63 | 58 | 50 | 42 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 36 | 36 | 26 | 29 | 28 | 25 | 26 | 25 | 22 |
| SO2 | ARITHMETIC MEAN | DOWN | 2 | 0.009 | 0.009 | 0.007 | 0.006 | 0.006 | 0.006 | 0.007 | 0.007 | 0.004 | 0.004 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.043 | 0.041 | 0.040 | 0.033 | 0.022 | 0.029 | 0.028 | 0.047 | 0.025 | 0.031 |
| TOPEKA, KS | | | | | | | | | | | | | |
| LEAD | MAX QUARTERLY MEAN | DOWN | 5 | 0.04 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 66 | 66 | 66 | 56 | 58 | 48 | 49 | 65 | 58 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 40 | 40 | 33 | 26 | 28 | 27 | 29 | 34 | 27 |
| TRENTON, NJ | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.16 | 0.20 | 0.14 | 0.14 | 0.15 | 0.15 | 0.14 | 0.14 | 0.13 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 79 | 66 | 68 | 58 | 49 | 66 | 64 | 45 | 59 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 32 | 30 | 29 | 31 | 26 | 27 | 29 | 24 | 27 |
| TULSA, OK | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 2 | 6.3 | 4.2 | 5.6 | 4.7 | 4.6 | 5.1 | 3.9 | 3.9 | 3.4 | 5.3 |
| LEAD | MAX QUARTERLY MEAN | NS | 1 | 0.13 | 0.13 | 0.20 | 0.11 | 0.21 | 0.10 | 0.20 | 0.10 | 0.09 | 0.11 |
| NO2 | ARITHMETIC MEAN | NS | 2 | 0.012 | 0.013 | 0.014 | 0.011 | 0.013 | 0.013 | 0.013 | 0.013 | 0.010 | 0.012 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.11 | 0.12 | 0.11 | 0.12 | 0.11 | 0.10 | 0.11 | 0.11 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 5 | — | 56 | 77 | 61 | 59 | 53 | 61 | 50 | 53 | 60 |
| | WEIGHTED ANNUAL MEAN | NS | 5 | — | 28 | 28 | 24 | 25 | 24 | 26 | 26 | 26 | 26 |
| SO2 | ARITHMETIC MEAN | NS | 2 | 0.008 | 0.009 | 0.006 | 0.009 | 0.009 | 0.006 | 0.005 | 0.007 | 0.008 | 0.008 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.058 | 0.045 | 0.035 | 0.046 | 0.052 | 0.048 | 0.035 | 0.031 | 0.031 | 0.036 |
| TUSCALOOSA, AL | | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 59 | 59 | 70 | 62 | 45 | 66 | 48 | 63 | 58 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 29 | 29 | 32 | 28 | 26 | 26 | 26 | 27 | 26 |
| TUSCON, AZ | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 5.6 | 6.8 | 5.7 | 4.6 | 4.4 | 4.6 | 4.5 | 4.4 | 4.3 | 4.1 |
| NO2 | ARITHMETIC MEAN | DOWN | 1 | 0.023 | 0.023 | 0.023 | 0.022 | 0.024 | 0.023 | 0.022 | 0.021 | 0.020 | 0.019 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 5 | 0.08 | 0.09 | 0.09 | 0.09 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 10 | — | 90 | 90 | 87 | 55 | 44 | 40 | 54 | 47 | 47 |
| | WEIGHTED ANNUAL MEAN | DOWN | 10 | — | 37 | 39 | 33 | 25 | 23 | 21 | 25 | 25 | 25 |
| UTICA-ROME, NY | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.11 | 0.12 | 0.09 | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.08 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|-------------------------|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| VALLEJO-FAIRFIELD-NAPA, CA | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 6.6 | 7.3 | 7.4 | 6.9 | 6.6 | 5.6 | 5.6 | 5.2 | 4.2 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.09 | 0.10 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 1 | — | 94 | 94 | 94 | 98 | 69 | 46 | 57 | 51 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 27 | 27 | 27 | 41 | 24 | 23 | 21 | 19 |
| VENTURA, CA | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 2 | 3.9 | 3.3 | 3.0 | 3.3 | 3.1 | 2.3 | 2.5 | 2.8 | 3.2 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 1 | 0.05 | 0.03 | 0.04 | 0.02 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.015 | 0.016 | 0.017 | 0.016 | 0.015 | 0.014 | 0.014 | 0.014 | 0.014 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 6 | 0.15 | 0.14 | 0.15 | 0.13 | 0.14 | 0.13 | 0.12 | 0.13 | 0.13 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 74 | 74 | 83 | 69 | 63 | 55 | 51 | 60 |
| | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 38 | 38 | 34 | 35 | 30 | 27 | 29 | 26 |
| VINELAND-MILLVILLE-BRIDGETON, NJ | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.14 | 0.15 | 0.13 | 0.13 | 0.12 | 0.10 | 0.12 | 0.10 | 0.13 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.007 | 0.009 | 0.008 | 0.007 | 0.007 | 0.006 | 0.006 | 0.005 | 0.004 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.038 | 0.034 | 0.049 | 0.024 | 0.023 | 0.021 | 0.019 | 0.032 | 0.016 |
| VISALIA-TULARE-PORTERVILLE, CA | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 5.5 | 5.6 | 5.9 | 5.0 | 5.3 | 4.3 | 3.5 | 4.0 | 4.2 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.019 | 0.023 | 0.021 | 0.021 | 0.022 | 0.020 | 0.023 | 0.023 | 0.018 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 3 | 0.13 | 0.12 | 0.13 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.12 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 113 | 154 | 173 | 129 | 102 | 99 | 86 | 115 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 60 | 61 | 69 | 61 | 51 | 49 | 42 | 40 |
| WASHINGTON, DC-MD-VA-WV | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 8 | 7.4 | 6.6 | 6.3 | 5.2 | 5.0 | 4.4 | 5.0 | 4.5 | 4.4 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 5 | 0.07 | 0.05 | 0.05 | 0.05 | 0.03 | 0.02 | 0.02 | 0.02 | 0.01 |
| NO ₂ | ARITHMETIC MEAN | NS | 7 | 0.027 | 0.025 | 0.025 | 0.027 | 0.026 | 0.026 | 0.026 | 0.026 | 0.023 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 13 | 0.13 | 0.15 | 0.11 | 0.11 | 0.12 | 0.11 | 0.12 | 0.12 | 0.11 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 9 | — | 61 | 65 | 54 | 53 | 42 | 53 | 47 | 50 |
| | WEIGHTED ANNUAL MEAN | DOWN | 9 | — | 29 | 30 | 26 | 26 | 23 | 22 | 22 | 21 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 4 | 0.008 | 0.009 | 0.010 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.007 |
| | SECOND MAX 24-HOUR | NS | 4 | 0.030 | 0.030 | 0.038 | 0.030 | 0.029 | 0.033 | 0.027 | 0.031 | 0.020 |
| WATERBURY, CT | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 3 | — | 68 | 64 | 75 | 63 | 52 | 52 | 55 | 58 |
| | WEIGHTED ANNUAL MEAN | NS | 3 | — | 30 | 31 | 31 | 29 | 23 | 23 | 25 | 24 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.009 | 0.010 | 0.010 | 0.010 | 0.009 | 0.007 | 0.006 | 0.007 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.038 | 0.055 | 0.048 | 0.042 | 0.038 | 0.029 | 0.021 | 0.030 | 0.019 |
| WEST PALM BEACH-BOCA RATON, FL | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 3.8 | 4.0 | 3.7 | 2.7 | 3.1 | 3.7 | 3.1 | 2.8 | 2.5 |
| NO ₂ | ARITHMETIC MEAN | NS | 1 | 0.012 | 0.013 | 0.013 | 0.014 | 0.012 | 0.011 | 0.013 | 0.012 | 0.012 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.09 | 0.10 | 0.11 | 0.09 | 0.07 | 0.07 | 0.11 | 0.08 | 0.08 |
| PM ₁₀ | SECOND MAX 24-HOUR | UP | 2 | — | 33 | 33 | 33 | 33 | 47 | 43 | 56 | 36 |
| | WEIGHTED ANNUAL MEAN | NS | 2 | — | 19 | 19 | 19 | 18 | 20 | 19 | 18 | 18 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.001 | 0.001 | 0.003 | 0.002 | 0.002 | 0.003 | 0.004 | 0.003 | 0.002 |
| | SECOND MAX 24-HOUR | UP | 1 | 0.004 | 0.004 | 0.009 | 0.007 | 0.012 | 0.010 | 0.028 | 0.016 | 0.019 |
| WHEELING, WV-OH | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 6.0 | 4.0 | 5.2 | 7.1 | 5.6 | 5.6 | 4.1 | 4.6 | 5.0 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.10 | 0.11 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 83 | 81 | 77 | 67 | 66 | 73 | 63 | 65 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 34 | 34 | 30 | 31 | 30 | 29 | 28 | 28 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 3 | 0.019 | 0.021 | 0.021 | 0.020 | 0.020 | 0.018 | 0.018 | 0.015 | 0.010 |
| | SECOND MAX 24-HOUR | NS | 3 | 0.069 | 0.072 | 0.065 | 0.064 | 0.074 | 0.077 | 0.075 | 0.065 | 0.055 |
| WICHITA FALLS, TX | | | | | | | | | | | | |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 56 | 56 | 56 | 55 | 52 | 62 | 73 | 57 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 27 | 27 | 27 | 27 | 23 | 26 | 27 | 20 |
| WICHITA, KS | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 3 | 7.5 | 7.0 | 7.9 | 5.9 | 5.9 | 5.6 | 5.0 | 4.9 | 5.2 |
| LEAD | MAX QUARTERLY MEAN | DOWN | 5 | 0.04 | 0.03 | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 2 | 0.08 | 0.10 | 0.07 | 0.10 | 0.09 | 0.08 | 0.08 | 0.09 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | UP | 4 | — | 62 | 61 | 63 | 68 | 65 | 83 | 64 | 72 |
| | WEIGHTED ANNUAL MEAN | NS | 4 | — | 31 | 30 | 28 | 31 | 32 | 31 | 26 | 25 |
| WILLIAMSPORT, PA | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.09 | 0.12 | 0.08 | 0.09 | 0.10 | 0.09 | 0.09 | 0.08 | 0.09 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 62 | 62 | 60 | 67 | 42 | 58 | 61 | 46 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 29 | 29 | 26 | 31 | 24 | 24 | 28 | 25 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.006 | 0.009 | 0.007 | 0.006 | 0.007 | 0.006 | 0.006 | 0.006 | 0.006 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.026 | 0.035 | 0.042 | 0.025 | 0.025 | 0.029 | 0.025 | 0.042 | 0.027 |
| WILMINGTON-NEWARK, DE-MD | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 4.9 | 5.3 | 4.5 | 5.4 | 4.0 | 4.1 | 3.8 | 4.3 | 4.6 |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.14 | 0.19 | 0.12 | 0.14 | 0.14 | 0.12 | 0.14 | 0.12 | 0.14 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 60 | 84 | 91 | 65 | 52 | 67 | 82 | 66 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 32 | 42 | 37 | 33 | 28 | 29 | 38 | 37 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.014 | 0.016 | 0.016 | 0.013 | 0.012 | 0.013 | 0.013 | 0.012 | 0.010 |
| | SECOND MAX 24-HOUR | DOWN | 2 | 0.047 | 0.054 | 0.048 | 0.043 | 0.033 | 0.046 | 0.041 | 0.044 | 0.036 |

Note: NS = Not Significant (no significant upward or downward trend).

Table A-15. Metropolitan Statistical Area Air Quality Trends, 1987–1996 (continued)

| Metropolitan Statistical Area | | Trend | #Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|-------------------------------|-------------------------|-------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| WORCESTER, MA-CT | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | NS | 1 | 7.1 | 5.6 | 7.9 | 6.0 | 7.2 | 8.0 | 6.1 | 5.9 | 4.2 | 5.3 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.034 | 0.029 | 0.026 | 0.022 | 0.023 | 0.024 | 0.028 | 0.025 | 0.021 | 0.019 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 2 | — | 62 | 55 | 48 | 47 | 41 | 43 | 43 | 39 | 42 |
| | WEIGHTED ANNUAL MEAN | DOWN | 2 | — | 27 | 26 | 23 | 21 | 20 | 20 | 20 | 19 | 20 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.009 | 0.009 | 0.011 | 0.008 | 0.009 | 0.007 | 0.007 | 0.008 | 0.006 | 0.005 |
| | SECOND MAX 24-HOUR | DOWN | 1 | 0.038 | 0.042 | 0.040 | 0.034 | 0.029 | 0.033 | 0.025 | 0.024 | 0.023 | 0.021 |
| YAKIMA, WA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 10.9 | 8.9 | 8.7 | 7.4 | 9.0 | 8.8 | 7.9 | 8.0 | 7.1 | 7.4 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 77 | 77 | 77 | 173 | 67 | 90 | 86 | 50 | 99 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 34 | 34 | 34 | 44 | 32 | 38 | 31 | 24 | 35 |
| YORK, PA | | | | | | | | | | | | | |
| CO | SECOND MAX 8-HOUR | DOWN | 1 | 4.8 | 4.2 | 4.6 | 4.4 | 3.7 | 3.6 | 3.3 | 3.9 | 2.7 | 2.8 |
| NO ₂ | ARITHMETIC MEAN | DOWN | 1 | 0.025 | 0.023 | 0.022 | 0.022 | 0.021 | 0.020 | 0.022 | 0.024 | 0.021 | 0.021 |
| OZONE | SECOND DAILY MAX 1-HOUR | DOWN | 1 | 0.12 | 0.14 | 0.10 | 0.12 | 0.11 | 0.10 | 0.11 | 0.12 | 0.10 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 81 | 57 | 63 | 69 | 47 | 77 | 80 | 66 | 51 |
| | WEIGHTED ANNUAL MEAN | NS | 1 | — | 33 | 31 | 30 | 32 | 27 | 31 | 32 | 30 | 28 |
| SO ₂ | ARITHMETIC MEAN | NS | 1 | 0.008 | 0.007 | 0.008 | 0.007 | 0.008 | 0.007 | 0.008 | 0.009 | 0.006 | 0.007 |
| | SECOND MAX 24-HOUR | NS | 1 | 0.032 | 0.029 | 0.035 | 0.023 | 0.020 | 0.034 | 0.032 | 0.041 | 0.020 | 0.022 |
| YOUNGSTOWN-WARREN, OH | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.12 | 0.11 | 0.10 | 0.12 | 0.10 | 0.10 | 0.10 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | DOWN | 6 | — | 87 | 86 | 78 | 82 | 77 | 74 | 78 | 82 | 58 |
| | WEIGHTED ANNUAL MEAN | DOWN | 6 | — | 37 | 36 | 31 | 34 | 31 | 30 | 31 | 30 | 28 |
| SO ₂ | ARITHMETIC MEAN | DOWN | 2 | 0.012 | 0.014 | 0.016 | 0.016 | 0.016 | 0.013 | 0.011 | 0.011 | 0.010 | 0.009 |
| | SECOND MAX 24-HOUR | NS | 2 | 0.058 | 0.077 | 0.043 | 0.053 | 0.048 | 0.056 | 0.063 | 0.051 | 0.038 | 0.044 |
| YUBA CITY, CA | | | | | | | | | | | | | |
| OZONE | SECOND DAILY MAX 1-HOUR | NS | 1 | 0.11 | 0.13 | 0.09 | 0.11 | 0.10 | 0.11 | 0.13 | 0.09 | 0.11 | 0.10 |
| PM ₁₀ | SECOND MAX 24-HOUR | NS | 1 | — | 88 | 88 | 88 | 95 | 75 | 69 | 81 | 114 | 69 |
| | WEIGHTED ANNUAL MEAN | DOWN | 1 | — | 39 | 39 | 39 | 39 | 34 | 30 | 34 | 33 | 29 |

- CO = Highest second maximum non-overlapping 8-hour concentration (*Applicable NAAQS is 9 ppm*)
 Pb = Highest quarterly maximum concentration (*Applicable NAAQS is 1.5 ug/m³*)
 NO₂ = Highest arithmetic mean concentration (*Applicable NAAQS is 0.053 ppm*)
 O₃ = Highest second daily maximum 1-hour concentration (*Applicable NAAQS is 0.12 ppm*)
 PM₁₀ = Highest weighted annual mean concentration (*Applicable NAAQS is 50 ug/m³*)
 Data from exceptional events not included.
 SO₂ = Highest second maximum 24-hour concentration (*Applicable NAAQS is 150 ug/m³*)
 = Highest annual mean concentration (*Applicable NAAQS is 0.03 ppm*)
 = Highest second maximum 24-hour concentration (*Applicable NAAQS is 0.14 ppm*)

Note: NS = Not Significant (no significant upward or downward trend).

Table A-16. Number of Days with PSI Values Greater Than 100 at Trend Sites, 1987–1996, and All Sites in 1996

| Metropolitan Statistical Area | # of Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | Total # of Sites | PSI > 100 1996 |
|---|------------------|------|------|------|------|------|------|------|------|------|------|------------------|----------------|
| AKRON, OH | 5 | 5 | 17 | 4 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 7 | 0 |
| ALBANY-SCHENECTADY-TROY, NY | 7 | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 12 | 0 |
| ALBUQUERQUE, NM | 21 | 26 | 8 | 10 | 7 | 5 | 0 | 1 | 1 | 2 | 0 | 26 | 0 |
| ALLENTOWN-BETHLEHEM-EASTON, PA | 9 | 5 | 16 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 11 | 0 |
| ATLANTA, GA | 8 | 27 | 21 | 3 | 17 | 6 | 5 | 17 | 4 | 19 | 6 | 16 | 12 |
| AUSTIN-SAN MARCOS, TX | 5 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 6 | 0 |
| BAKERSFIELD, CA | 6 | 67 | 87 | 76 | 60 | 65 | 32 | 56 | 47 | 49 | 56 | 20 | 59 |
| BALTIMORE, MD | 15 | 28 | 43 | 9 | 12 | 20 | 5 | 14 | 17 | 14 | 3 | 23 | 4 |
| BATON ROUGE, LA | 6 | 10 | 10 | 9 | 18 | 6 | 2 | 3 | 2 | 7 | 2 | 13 | 4 |
| BERGEN-PASSAIC, NJ | 8 | 14 | 19 | 4 | 4 | 3 | 0 | 0 | 0 | 4 | 0 | 9 | 0 |
| BIRMINGHAM, AL | 16 | 10 | 16 | 1 | 7 | 0 | 2 | 5 | 0 | 15 | 5 | 17 | 5 |
| BOSTON, MA-NH | 24 | 5 | 15 | 4 | 1 | 4 | 1 | 3 | 1 | 1 | 0 | 28 | 0 |
| BUFFALO-NIAGARA FALLS, NY | 21 | 4 | 18 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 |
| CHARLESTON-NORTH CHARLESTON, SC | 9 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 9 | 0 |
| CHARLOTTE-GASTONIA-ROCK HILL, NC-SC | 10 | 10 | 21 | 3 | 6 | 2 | 0 | 4 | 0 | 1 | 3 | 28 | 6 |
| CHICAGO, IL | 44 | 17 | 23 | 4 | 3 | 8 | 7 | 1 | 8 | 4 | 3 | 65 | 4 |
| CINCINNATI, OH-KY-IN | 21 | 11 | 21 | 3 | 6 | 7 | 0 | 1 | 4 | 7 | 1 | 23 | 2 |
| CLEVELAND-LORAIN-ELYRIA, OH | 24 | 6 | 21 | 4 | 2 | 3 | 2 | 2 | 4 | 4 | 1 | 40 | 5 |
| COLUMBUS, OH | 9 | 1 | 4 | 0 | 1 | 3 | 1 | 0 | 0 | 1 | 0 | 13 | 1 |
| DALLAS, TX | 8 | 10 | 14 | 7 | 8 | 1 | 3 | 5 | 1 | 13 | 2 | 24 | 6 |
| DAYTON-SPRINGFIELD, OH | 11 | 3 | 17 | 3 | 1 | 1 | 0 | 3 | 2 | 2 | 1 | 12 | 1 |
| DENVER, CO | 21 | 37 | 19 | 11 | 9 | 7 | 7 | 3 | 2 | 2 | 1 | 32 | 1 |
| DETROIT, MI | 28 | 9 | 17 | 10 | 3 | 8 | 1 | 2 | 8 | 11 | 3 | 35 | 3 |
| EL PASO, TX | 17 | 32 | 16 | 33 | 27 | 13 | 17 | 10 | 10 | 4 | 9 | 21 | 10 |
| FORT LAUDERDALE, FL | 7 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 19 | 0 |
| FORT WORTH-ARLINGTON, TX | 8 | 4 | 11 | 8 | 5 | 9 | 2 | 1 | 8 | 6 | 3 | 8 | 3 |
| FRESNO, CA | 8 | 49 | 29 | 47 | 29 | 33 | 27 | 28 | 11 | 19 | 31 | 17 | 39 |
| GARY, IN | 18 | 8 | 13 | 1 | 3 | 3 | 2 | 0 | 1 | 4 | 3 | 23 | 3 |
| GRAND RAPIDS-MUSKEGON-HOLLAND, MI | 6 | 5 | 10 | 3 | 2 | 2 | 0 | 1 | 1 | 1 | 3 | 9 | 4 |
| GREENSBORO-WINSTON-SALEM-HIGH POINT, NC | 10 | 0 | 19 | 5 | 2 | 0 | 0 | 2 | 1 | 0 | 2 | 22 | 2 |
| GREENVILLE-SPARTANBURG-ANDERSON, SC | 2 | 0 | 8 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 8 | 1 |
| HARRISBURG-LEBANON-CARLISLE, PA | 7 | 5 | 13 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 7 | 0 |
| HARTFORD, CT | 14 | 20 | 27 | 11 | 7 | 14 | 9 | 9 | 10 | 9 | 1 | 15 | 1 |
| HONOLULU, HI | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 |
| HOUSTON, TX | 28 | 67 | 61 | 41 | 59 | 42 | 30 | 26 | 29 | 54 | 28 | 33 | 32 |
| INDIANAPOLIS, IN | 27 | 3 | 9 | 2 | 1 | 1 | 1 | 0 | 2 | 2 | 2 | 33 | 5 |
| JACKSONVILLE, FL | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 19 | 0 |
| JERSEY CITY, NJ | 8 | 12 | 18 | 2 | 7 | 8 | 1 | 5 | 1 | 2 | 2 | 10 | 2 |
| KANSAS CITY, MO-KS | 24 | 6 | 4 | 2 | 2 | 2 | 1 | 2 | 0 | 6 | 3 | 28 | 3 |
| KNOXVILLE, TN | 13 | 0 | 8 | 0 | 5 | 0 | 0 | 2 | 1 | 4 | 1 | 24 | 1 |
| LAS VEGAS, NV-AZ | 7 | 7 | 31 | 46 | 22 | 12 | 5 | 8 | 12 | 7 | 3 | 19 | 13 |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 8 | 0 |
| LOS ANGELES-LONG BEACH, CA | 36 | 201 | 239 | 226 | 180 | 184 | 185 | 146 | 136 | 103 | 88 | 40 | 89 |
| LOUISVILLE, KY-IN | 17 | 2 | 20 | 3 | 4 | 4 | 0 | 6 | 4 | 4 | 3 | 27 | 4 |
| MEMPHIS, TN-AR-MS | 12 | 10 | 9 | 5 | 6 | 1 | 2 | 4 | 1 | 7 | 7 | 15 | 8 |
| MIAMI, FL | 10 | 4 | 5 | 4 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 12 | 1 |
| MIDDLESEX-SOMERSET-HUNTERDON, NJ | 5 | 10 | 24 | 8 | 12 | 8 | 3 | 1 | 5 | 1 | 0 | 7 | 3 |
| MILWAUKEE-WAUKESHA, WI | 17 | 13 | 19 | 8 | 2 | 10 | 0 | 0 | 4 | 5 | 1 | 21 | 1 |
| MINNEAPOLIS-ST. PAUL, MN-WI | 23 | 14 | 3 | 7 | 3 | 2 | 1 | 0 | 5 | 3 | 1 | 41 | 1 |

Table A-16. Number of Days with PSI Values Greater Than 100 at Trend Sites, 1987–1996, and All Sites in 1996 (continued)

| Metropolitan Statistical Area | # of Trend Sites | | | | | | | | | | | Total # of Sites | PSI > 100 1996 |
|--------------------------------------|------------------|------|------|------|------|------|------|------|------|------|------|------------------|----------------|
| | | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | | |
| MONMOUTH-OCEAN, NJ | 3 | 0 | 0 | 11 | 7 | 9 | 2 | 6 | 0 | 5 | 2 | 4 | 3 |
| NASHVILLE, TN | 20 | 4 | 23 | 4 | 9 | 1 | 1 | 2 | 3 | 2 | 2 | 27 | 2 |
| NASSAU-SUFFOLK, NY | 4 | 15 | 10 | 6 | 7 | 13 | 2 | 4 | 3 | 5 | 2 | 8 | 2 |
| NEW HAVEN-MERIDEN, CT | 11 | 20 | 16 | 7 | 10 | 22 | 3 | 11 | 8 | 8 | 2 | 10 | 2 |
| NEW ORLEANS, LA | 10 | 5 | 2 | 1 | 0 | 0 | 1 | 2 | 2 | 3 | 0 | 14 | 1 |
| NEW YORK, NY | 26 | 44 | 46 | 18 | 18 | 22 | 4 | 6 | 8 | 8 | 4 | 38 | 7 |
| NEWARK, NJ | 13 | 24 | 33 | 5 | 8 | 11 | 5 | 2 | 6 | 6 | 2 | 16 | 2 |
| NORFOLK-VA BEACH-NEWPORT NEWS, VA-NC | 11 | 5 | 8 | 0 | 0 | 1 | 2 | 4 | 2 | 0 | 0 | 12 | 0 |
| OAKLAND, CA | 19 | 14 | 10 | 3 | 5 | 6 | 2 | 3 | 3 | 12 | 11 | 29 | 11 |
| OKLAHOMA CITY, OK | 13 | 6 | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 3 | 1 | 14 | 1 |
| OMAHA, NE-IA | 9 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 13 | 1 |
| ORANGE COUNTY, CA | 9 | 58 | 63 | 66 | 47 | 40 | 43 | 25 | 14 | 6 | 6 | 11 | 6 |
| ORLANDO, FL | 9 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 16 | 0 |
| PHILADELPHIA, PA-NJ | 37 | 35 | 35 | 19 | 14 | 25 | 3 | 21 | 6 | 14 | 5 | 48 | 22 |
| PHOENIX-MESA, AZ | 25 | 42 | 27 | 30 | 9 | 4 | 10 | 7 | 9 | 13 | 5 | 29 | 10 |
| PITTSBURGH, PA | 37 | 10 | 20 | 9 | 8 | 4 | 1 | 3 | 2 | 7 | 0 | 55 | 1 |
| PONCE, PR | 1 | . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| PORTLAND-VANCOUVER, OR-WA | 12 | 11 | 8 | 6 | 8 | 9 | 2 | 0 | 2 | 0 | 4 | 17 | 4 |
| PROVIDENCE-FALL RIVER-WARWICK, RI-MA | 11 | 10 | 9 | 2 | 7 | 11 | 2 | 1 | 2 | 5 | 0 | 20 | 0 |
| RALEIGH-DURHAM-CHAPEL HILL, NC | 4 | 3 | 4 | 4 | 2 | 1 | 1 | 0 | 1 | 0 | 0 | 23 | 0 |
| RICHMOND-PETERSBURG, VA | 10 | 8 | 20 | 1 | 3 | 4 | 3 | 9 | 1 | 4 | 0 | 11 | 0 |
| RIVERSIDE-SAN BERNARDINO, CA | 36 | 171 | 180 | 178 | 144 | 144 | 156 | 142 | 124 | 113 | 94 | 53 | 94 |
| ROCHESTER, NY | 8 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| SACRAMENTO, CA | 12 | 52 | 72 | 57 | 41 | 46 | 21 | 11 | 11 | 16 | 12 | 37 | 17 |
| ST. LOUIS, MO-IL | 53 | 17 | 20 | 13 | 8 | 6 | 3 | 6 | 11 | 14 | 4 | 61 | 4 |
| SALT LAKE CITY-OGDEN, UT | 18 | 7 | 11 | 15 | 2 | 19 | 10 | 3 | 10 | 1 | 3 | 23 | 6 |
| SAN ANTONIO, TX | 7 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 2 | 7 | 2 |
| SAN DIEGO, CA | 20 | 61 | 84 | 91 | 61 | 40 | 37 | 17 | 16 | 14 | 4 | 27 | 4 |
| SAN FRANCISCO, CA | 9 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 11 | 0 |
| SAN JOSE, CA | 8 | 18 | 16 | 21 | 11 | 11 | 2 | 2 | 0 | 5 | 2 | 11 | 2 |
| SAN JUAN-BAYAMON, PR | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 1 |
| SCRANTON-WILKES-BARRE-HAZLETON, PA | 10 | 1 | 12 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 11 | 0 |
| SEATTLE-BELLEVUE-EVERETT, WA | 14 | 14 | 20 | 8 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 21 | 1 |
| SPRINGFIELD, MA | 16 | 3 | 19 | 5 | 4 | 5 | 4 | 7 | 3 | 4 | 1 | 13 | 1 |
| SYRACUSE, NY | 4 | 3 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| TACOMA, WA | 8 | 9 | 9 | 4 | 3 | 1 | 1 | 0 | 1 | 0 | 0 | 9 | 0 |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | 20 | 5 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 1 | 2 | 35 | 2 |
| TOLEDO, OH | 5 | 2 | 6 | 1 | 0 | 1 | 0 | 3 | 1 | 0 | 0 | 8 | 1 |
| TUSCON, AZ | 18 | 4 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 0 |
| TULSA, OK | 12 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 4 | 2 | 13 | 2 |
| VENTURA, CA | 13 | 54 | 83 | 59 | 36 | 49 | 25 | 16 | 24 | 30 | 25 | 18 | 28 |
| WASHINGTON, DC-MD-VA-WV | 34 | 26 | 37 | 8 | 5 | 16 | 2 | 13 | 7 | 8 | 2 | 52 | 2 |
| WEST PALM BEACH-BOCA RATON, FL | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| WILMINGTON-NEWARK, DE-MD | 5 | 16 | 22 | 3 | 4 | 6 | 2 | 3 | 1 | 6 | 0 | 12 | 1 |
| YOUNGSTOWN-WARREN, OH | 9 | 0 | 5 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 15 | 0 |

Table A-17. (Ozone only) Number of Days with PSI Values Greater Than 100 at Trend Sites, 1987–1996, and All Sites in 1996

| Metropolitan Statistical Area | # of Trend Sites | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | Total # of Sites | PSI > 100 1996 |
|---|------------------|------|------|------|------|------|------|------|------|------|------|------------------|----------------|
| AKRON, OH | 2 | 5 | 17 | 4 | 2 | 2 | 1 | 0 | 0 | 1 | 0 | 2 | 0 |
| ALBANY-SCHENECTADY-TROY, NY | 3 | 0 | 7 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 |
| ALBUQUERQUE, NM | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 9 | 0 |
| ALLENTOWN-BETHLEHEM-EASTON, PA | 3 | 5 | 15 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| ATLANTA, GA | 3 | 27 | 21 | 3 | 17 | 6 | 5 | 17 | 4 | 19 | 6 | 6 | 12 |
| AUSTIN-SAN MARCOS, TX | 2 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| BAKERSFIELD, CA | 4 | 67 | 83 | 73 | 57 | 62 | 31 | 56 | 47 | 48 | 56 | 8 | 58 |
| BALTIMORE, MD | 6 | 26 | 40 | 8 | 11 | 20 | 5 | 14 | 16 | 14 | 3 | 8 | 4 |
| BATON ROUGE, LA | 3 | 10 | 10 | 9 | 18 | 6 | 2 | 3 | 2 | 7 | 2 | 7 | 4 |
| BERGEN-PASSAIC, NJ | 1 | 13 | 18 | 2 | 3 | 3 | 0 | 0 | 0 | 4 | 0 | 1 | 0 |
| BIRMINGHAM, AL | 6 | 7 | 15 | 1 | 7 | 0 | 2 | 5 | 0 | 15 | 5 | 6 | 5 |
| BOSTON, MA-NH | 4 | 4 | 15 | 4 | 1 | 4 | 1 | 3 | 1 | 1 | 0 | 6 | 0 |
| BUFFALO-NIAGARA FALLS, NY | 2 | 4 | 18 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| CHARLESTON-NORTH CHARLESTON, SC | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 |
| CHARLOTTE-GASTONIA-ROCK HILL, NC-SC | 3 | 10 | 21 | 2 | 3 | 2 | 0 | 4 | 0 | 1 | 3 | 7 | 6 |
| CHICAGO, IL | 16 | 16 | 22 | 3 | 0 | 7 | 3 | 0 | 2 | 4 | 2 | 22 | 3 |
| CINCINNATI, OH-KY-IN | 6 | 11 | 21 | 3 | 6 | 7 | 0 | 1 | 4 | 7 | 1 | 8 | 2 |
| CLEVELAND-LORAIN-ELYRIA, OH | 6 | 6 | 21 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 8 | 2 |
| COLUMBUS, OH | 2 | 1 | 4 | 0 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 4 | 1 |
| DALLAS, TX | 2 | 10 | 14 | 7 | 8 | 1 | 3 | 5 | 1 | 13 | 2 | 7 | 6 |
| DAYTON-SPRINGFIELD, OH | 3 | 2 | 17 | 3 | 1 | 1 | 0 | 3 | 2 | 2 | 1 | 4 | 1 |
| DENVER, CO | 5 | 5 | 4 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| DETROIT, MI | 7 | 6 | 16 | 10 | 3 | 8 | 0 | 2 | 6 | 9 | 2 | 8 | 2 |
| EL PASO, TX | 3 | 17 | 6 | 13 | 9 | 7 | 7 | 4 | 6 | 3 | 3 | 4 | 4 |
| FORT LAUDERDALE, FL | 2 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |
| FORT WORTH-ARLINGTON, TX | 2 | 4 | 11 | 8 | 5 | 9 | 2 | 1 | 8 | 6 | 3 | 2 | 3 |
| FRESNO, CA | 3 | 49 | 28 | 45 | 22 | 32 | 27 | 27 | 11 | 19 | 31 | 7 | 39 |
| GARY, IN | 4 | 6 | 13 | 0 | 3 | 3 | 2 | 0 | 1 | 4 | 3 | 4 | 3 |
| GRAND RAPIDS-MUSKEGON-HOLLAND, MI | 2 | 5 | 10 | 3 | 2 | 2 | 0 | 1 | 1 | 1 | 3 | 5 | 4 |
| GREENSBORO—WINSTON-SALEM—HIGH POINT, NC | 3 | 0 | 14 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 2 | 6 | 2 |
| GREENVILLE-SPARTANBURG-ANDERSON, SC | 2 | 0 | 8 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 4 | 1 |
| HARRISBURG-LEBANON-CARLISLE, PA | 3 | 5 | 13 | 0 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 3 | 0 |
| HARTFORD, CT | 3 | 10 | 24 | 9 | 7 | 12 | 8 | 9 | 10 | 7 | 1 | 3 | 1 |
| HONOLULU, HI | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| HOUSTON, TX | 10 | 66 | 61 | 41 | 59 | 42 | 30 | 26 | 29 | 54 | 28 | 12 | 32 |
| INDIANAPOLIS, IN | 5 | 3 | 9 | 2 | 1 | 0 | 0 | 0 | 2 | 2 | 2 | 7 | 5 |
| JACKSONVILLE, FL | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 3 | 0 |
| JERSEY CITY, NJ | 1 | 12 | 18 | 2 | 7 | 8 | 1 | 5 | 1 | 2 | 2 | 1 | 2 |
| KANSAS CITY, MO-KS | 6 | 5 | 4 | 1 | 2 | 2 | 1 | 1 | 0 | 6 | 2 | 7 | 2 |
| KNOXVILLE, TN | 4 | 0 | 8 | 0 | 5 | 0 | 0 | 2 | 1 | 4 | 1 | 8 | 1 |
| LAS VEGAS, NV-AZ | 3 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| LITTLE ROCK-NORTH LITTLE ROCK, AR | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| LOS ANGELES-LONG BEACH, CA | 13 | 160 | 178 | 154 | 132 | 134 | 143 | 116 | 107 | 84 | 62 | 15 | 63 |
| LOUISVILLE, KY-IN | 4 | 2 | 20 | 1 | 4 | 4 | 0 | 6 | 4 | 4 | 3 | 7 | 4 |
| MEMPHIS, TN-AR-MS | 3 | 5 | 8 | 2 | 4 | 0 | 0 | 1 | 0 | 7 | 6 | 4 | 7 |
| MIAMI, FL | 4 | 4 | 5 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 1 | 4 | 1 |
| MIDDLESEX-SOMERSET-HUNTERDON, NJ | 2 | 10 | 24 | 8 | 12 | 8 | 3 | 1 | 5 | 1 | 0 | 2 | 3 |
| MILWAUKEE-WAUKESHA, WI | 6 | 13 | 19 | 8 | 2 | 10 | 0 | 0 | 4 | 5 | 1 | 9 | 1 |
| MINNEAPOLIS-ST. PAUL, MN-WI | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 |

Table A-17. (Ozone only) Number of Days with PSI Values Greater Than 100 at Trend Sites, 1987–1996, and All Sites in 1996 (continued)

| Metropolitan Statistical Area | # of Trend Sites | | | | | | | | | | | Total # of Sites | PSI > 100 1996 |
|--|------------------|------|------|------|------|------|------|------|------|------|------|------------------|----------------|
| | | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | | |
| MONMOUTH-OCEAN, NJ | 1 | 0 | 0 | 11 | 7 | 9 | 2 | 6 | 0 | 5 | 2 | 2 | 3 |
| NASHVILLE, TN | 7 | 3 | 23 | 2 | 9 | 1 | 1 | 2 | 3 | 2 | 2 | 9 | 2 |
| NASSAU-SUFFOLK, NY | 1 | 11 | 8 | 6 | 7 | 13 | 2 | 4 | 3 | 5 | 2 | 2 | 2 |
| NEW HAVEN-MERIDEN, CT | 2 | 17 | 16 | 7 | 8 | 20 | 3 | 7 | 6 | 8 | 2 | 2 | 2 |
| NEW ORLEANS, LA | 5 | 5 | 2 | 1 | 0 | 0 | 1 | 2 | 2 | 3 | 0 | 6 | 1 |
| NEW YORK, NY | 4 | 16 | 32 | 12 | 13 | 19 | 3 | 6 | 8 | 7 | 4 | 8 | 7 |
| NEWARK, NJ | 3 | 23 | 30 | 4 | 7 | 8 | 5 | 2 | 4 | 6 | 2 | 3 | 2 |
| NORFOLK-VIRGINIA BEACH-NEWPORT NEWS, VA-NC | 2 | 3 | 7 | 0 | 0 | 1 | 2 | 4 | 2 | 0 | 0 | 3 | 0 |
| OAKLAND, CA | 7 | 14 | 10 | 3 | 5 | 5 | 2 | 3 | 3 | 12 | 11 | 9 | 11 |
| OKLAHOMA CITY, OK | 4 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 0 |
| OMAHA, NE-IA | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| ORANGE COUNTY, CA | 3 | 54 | 53 | 48 | 43 | 40 | 41 | 25 | 14 | 5 | 6 | 4 | 6 |
| ORLANDO, FL | 3 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 |
| PHILADELPHIA, PA-NJ | 8 | 34 | 35 | 17 | 14 | 25 | 3 | 21 | 5 | 14 | 5 | 10 | 5 |
| PHOENIX-MESA, AZ | 9 | 2 | 4 | 0 | 3 | 0 | 5 | 5 | 4 | 7 | 5 | 10 | 5 |
| PITTSBURGH, PA | 6 | 5 | 16 | 2 | 0 | 2 | 0 | 3 | 2 | 6 | 0 | 11 | 1 |
| PONCE, PR | . | . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | . | 0 |
| PORTLAND-VANCOUVER, OR-WA | 3 | 2 | 2 | 0 | 4 | 1 | 2 | 0 | 0 | 0 | 4 | 4 | 4 |
| PROVIDENCE-FALL RIVER-WARWICK, RI-MA | 2 | 10 | 8 | 2 | 7 | 11 | 2 | 1 | 2 | 5 | 0 | 3 | 0 |
| RALEIGH-DURHAM-CHAPEL HILL, NC | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 8 | 0 |
| RICHMOND-PETERSBURG, VA | 4 | 7 | 20 | 1 | 3 | 4 | 3 | 9 | 1 | 4 | 0 | 4 | 0 |
| RIVERSIDE-SAN BERNARDINO, CA | 16 | 168 | 179 | 169 | 138 | 141 | 154 | 141 | 123 | 107 | 91 | 20 | 91 |
| ROCHESTER, NY | 2 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| SACRAMENTO, CA | 6 | 30 | 49 | 18 | 16 | 30 | 20 | 8 | 11 | 16 | 12 | 14 | 17 |
| ST. LOUIS, MO-IL | 16 | 14 | 20 | 7 | 8 | 6 | 3 | 6 | 11 | 14 | 4 | 17 | 4 |
| SALT LAKE CITY-OGDEN, UT | 4 | 2 | 8 | 7 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 6 | 3 |
| SAN ANTONIO, TX | 2 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 2 | 2 | 2 |
| SAN DIEGO, CA | 8 | 60 | 80 | 82 | 60 | 40 | 37 | 17 | 16 | 14 | 4 | 9 | 4 |
| SAN FRANCISCO, CA | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |
| SAN JOSE, CA | 4 | 18 | 11 | 6 | 2 | 3 | 2 | 2 | 0 | 5 | 2 | 6 | 2 |
| SAN JUAN-BAYAMON, PR | . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | . | 0 |
| SCRANTON—WILKES-BARRE—HAZLETON, PA | 3 | 1 | 12 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| SEATTLE-BELLEVUE-EVERETT, WA | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 |
| SPRINGFIELD, MA | 4 | 2 | 19 | 5 | 4 | 5 | 3 | 7 | 3 | 3 | 0 | 4 | 0 |
| SYRACUSE, NY | . | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| TACOMA, WA | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| TAMPA-ST. PETERSBURG-CLEARWATER, FL | 5 | 5 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 1 | 2 | 7 | 2 |
| TOLEDO, OH | 2 | 2 | 6 | 1 | 0 | 1 | 0 | 3 | 1 | 0 | 0 | 4 | 1 |
| TUSCON, AZ | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| TULSA, OK | 3 | 1 | 2 | 2 | 3 | 2 | 0 | 1 | 2 | 4 | 2 | 3 | 2 |
| VENTURA, CA | 6 | 54 | 83 | 59 | 36 | 49 | 25 | 16 | 24 | 30 | 25 | 8 | 28 |
| WASHINGTON, DC-MD-VA-WV | 13 | 21 | 35 | 5 | 5 | 16 | 2 | 13 | 7 | 8 | 2 | 18 | 2 |
| WEST PALM BEACH-BOCA RATON, FL | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| WILMINGTON-NEWARK, DE-MD | 1 | 16 | 22 | 3 | 4 | 6 | 2 | 3 | 1 | 6 | 0 | 4 | 1 |
| YOUNGSTOWN-WARREN, OH | 1 | 0 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |

Table A-18. Total Number of Days with PSI Values Greater Than 100 at Trend Sites—Summary, 1987–1996

| Metropolitan Statistical Area | # of Trend Sites | | | | | | | | | | | Total # of Sites | PSI > 100 1996 |
|-------------------------------|------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------------------|----------------|
| | | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | | |
| All Pollutants | | | | | | | | | | | | | |
| All Trend Sites | 1,333 | 1,565 | 1,987 | 1,300 | 1,050 | 1,043 | 712 | 705 | 635 | 725 | 480 | 1,921 | 582 |
| LOS ANGELES–LONG BEACH, CA | 36 | 201 | 239 | 226 | 180 | 184 | 185 | 146 | 136 | 103 | 88 | 40 | 89 |
| RIVERSIDE–SAN BERNADINO, CA | 36 | 171 | 180 | 178 | 144 | 144 | 156 | 142 | 124 | 113 | 94 | 53 | 94 |
| All Except LA and Riverside | 1,261 | 1,193 | 1,568 | 896 | 726 | 715 | 371 | 417 | 375 | 509 | 298 | 1,828 | 399 |
| Ozone Only | | | | | | | | | | | | | |
| All Trend Sites | 380 | 1,221 | 1,696 | 922 | 849 | 877 | 607 | 636 | 545 | 666 | 429 | 534 | 495 |
| LOS ANGELES–LONG BEACH, CA | 13 | 160 | 178 | 154 | 132 | 134 | 143 | 116 | 107 | 84 | 62 | 15 | 63 |
| RIVERSIDE–SAN BERNADINO, CA | 16 | 168 | 179 | 169 | 138 | 141 | 154 | 141 | 123 | 107 | 91 | 20 | 91 |
| All Except LA and Riverside | 351 | 893 | 1,339 | 599 | 579 | 602 | 310 | 379 | 315 | 475 | 276 | 499 | 341 |